

Supplementary File 1: alignments and information on downstream genes and taxonomy Discovery of 20 novel ribosomal leader candidates in bacteria and archaea

Iris Eckert & Zasha Weinberg

Note: the presentation and explanatory text of this supplementary data on novel RNA motifs follows the pattern of a presentation of previously found conserved RNA motifs (Weinberg, *et al.*, 2010).

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1 L2-Alphaproteobacteria

1.1 Taxa

The taxonomy of each organism containing a putative L2-Alphaproteobacteria RNA is listed, with abbreviations identifying each hit (e.g., “Eco-1-1” and “Eco-1-2” might hypothetically represent two distinct RNAs in *E. coli*). The abbreviations will be used to identify each individual L2-Alphaproteobacteria RNA in Sections 1.2 and 1.4:

abbrev. of hits	taxonomy of species
Aat-1-1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae <i>Actibacterium atlanticum</i>
Amu-1-1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae <i>Actibacterium mucosum</i> KCTC 23349
Aat-2-1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae <i>Aestuariivita atlantica</i>
Abo-1-1	Bacteria Proteobacteria Alphaproteobacteria Rhodobacterales Rhodobacteraceae <i>Aestuariivita boseongensis</i>

Cba-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Celeribacter baekdomensis</i> B30
Csp-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Citricella</i> sp. 357
Csp-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Citricella</i> sp. SE45
Dsp-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Defluviimonas</i> sp. 20V17
Dsh-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Dinoroseobacter shibae</i> DFL 12
Gne-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Gemmobacter nectariphilus</i> DSM 15620
Hma-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Haematobacter massiliensis</i>
Hmi-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Haematobacter missouriensis</i>
Hna-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Halocynthiibacter namhaensis</i>
Hsp-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Halocynthiibacter</i> sp. PAMC 20958
Jaq-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Jannaschia aquimarina</i>
Jsp-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Jannaschia</i> sp. CCS1
Kvu-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ketogulonicigenium vulgare</i> WSH-001
Kvu-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ketogulonicigenium vulgare</i> Y25
Laq-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera aquimarina</i> DSM 24565
Lca-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera caerulea</i> DSM 24564
Lda-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera daeponensis</i> DSM 23529
Lme-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera methylolithivorans</i> DSM 14336
Lsp-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera</i> sp. ANG-DT
Lsp-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera</i> sp. ANG-M1
Lsp-3-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera</i> sp. ANG-M6
Lsp-4-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera</i> sp. ANG-M7
Lsp-5-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera</i> sp. ANG-S
Lsp-6-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera</i> sp. ANG-S3
Lsp-7-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera</i> sp. ANG-S5
Lsp-8-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera</i> sp. ANG-Vp
Lsp-9-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Leisingera</i> sp. ANG1
Lci-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Loktanella cinnabarina</i> LL-001
Lho-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Loktanella hongkongensis</i> DSM 17492
Lsp-10-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Loktanella</i> sp. S4079
Lve-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Loktanella vestfoldensis</i> DSM 16212
Lve-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Loktanella vestfoldensis</i> SKA53
Mal-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Mameliella alba</i>
Msp-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Maribius</i> sp. MOLA 401
Mal-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Marinovum algicola</i> DG 898
Nit-1-1 to Nit-1-2	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Nautella italica</i>
Nsp-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Nautella</i> sp. ECSMB14104
Nig-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Nereida ignava</i>
Oin-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Oceanibulbus indolifex</i> HEL-45
Oba-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Oceanicola batsensis</i> HTCC2597
Ogr-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Oceanicola granulatus</i> HTCC2516
Osp-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Oceanicola</i> sp. HL-35
Osp-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Oceanicola</i> sp. MCTG156(1a)
Osp-3-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Oceanicola</i> sp. S124
Ogu-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Oceaniovalibus guishaninsula</i> JLT2003
Oan-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Octadecabacter antarcticus</i> 307
Oar-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Octadecabacter arcticus</i> 238
Ote-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Octadecabacter temperatus</i>
Pde-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Paracoccus denitrificans</i> PD1222
Pga-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Phaeobacter gallaeciensis</i> 2.10
Pga-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Phaeobacter gallaeciensis</i> DSM 17395
Pga-3-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Phaeobacter gallaeciensis</i> DSM 26640
Pin-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Phaeobacter inhibens</i> DSM 16374
Psp-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Phaeobacter</i> sp. S26
Psp-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Phaeobacter</i> sp. S60
Pte-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Planktomarina temperata</i> RCA23
Pxi-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Pseudodonghicola xiamenensis</i> DSM 18339
Pat-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Pseudoocenicola atlanticus</i>
Pna-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Pseudoocenicola nanhaiensis</i> DSM 18065
Par-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Pseudophaeobacter arcticus</i> DSM 23566
Pan-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Pseudorhodobacter antarcticus</i>
Paq-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Pseudorhodobacter aquimaris</i>
Pfe-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Pseudorhodobacter ferrugineus</i>
Pfe-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Pseudorhodobacter ferrugineus</i> DSM 5888
Pwa-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Pseudorhodobacter wandonensis</i>

Psp-3-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Puniceibacterium</i> sp. IMCC21224
CRh-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter Candidatus</i> <i>Rhodobacter lobularis</i>
Rca-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter capsulatus</i> B6
Rca-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter capsulatus</i> DE442
Rca-3-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter capsulatus</i> R121
Rca-4-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter capsulatus</i> SB 1003
Rca-5-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter capsulatus</i> Y262
Rca-6-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter capsulatus</i> YW1
Rca-7-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter capsulatus</i> YW2
Rsp-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter</i> sp. AKP1
Rsp-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter</i> sp. SW2
Rsp-3-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter sphaeroides</i> 2.4.1
Rsp-4-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter sphaeroides</i> ATCC 17025
Rsp-5-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter sphaeroides</i> ATCC 17029
Rsp-6-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter sphaeroides</i> KD131
Rsp-7-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rhodobacter sphaeroides</i> WS8N
Rba-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>bacterium</i> HIMB11
Rba-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>bacterium</i> KLH11
Rba-3-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>bacterium</i> PD-2
Rel-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseibacterium elongatum</i> DSM 19469
Rat-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseivivax atlanticus</i>
Rha-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseivivax halodurans</i> JCM 10272
Ris-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseivivax isoporae</i> LMG 25204
Rde-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseobacter denitrificans</i> Och 114
Rli-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseobacter litoralis</i> Och 149
Rsp-8-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseobacter</i> sp. AzwK-3b
Rsp-9-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseobacter</i> sp. CCS2
Rsp-10-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseobacter</i> sp. GAI101
Rsp-11-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseobacter</i> sp. MED193
Rsp-12-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseobacter</i> sp. SK209-2-6
Rmu-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseovarius mucosus</i> DSM 17069
Rnu-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseovarius nubinhbens</i> ISM
Rsp-13-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseovarius</i> sp. 217
Rsp-14-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseovarius</i> sp. HTCC2601
Rsp-15-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseovarius</i> sp. MCTG156(2b)
Rsp-16-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseovarius</i> sp. TM1035
Rto-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Roseovarius tolerans</i>
Rme-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Rubellimicrobium mesophilum</i> DSM 19309
Rha-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ruegeria halocynthiae</i>
Rmo-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ruegeria mobilis</i>
Rmo-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ruegeria mobilis</i> F1926
Rpo-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ruegeria pomeroyi</i> DSS-3
Rsp-17-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ruegeria</i> sp. 6PALISEP08
Rsp-18-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ruegeria</i> sp. ANG-R
Rsp-19-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ruegeria</i> sp. ANG-S4
Rsp-20-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ruegeria</i> sp. R11
Rsp-21-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ruegeria</i> sp. TM1040
Rsp-22-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ruegeria</i> sp. TW15
Sla-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ruegeria Silicibacter lacuscaerulensis</i> ITI-1157
Ssp-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Ruegeria Silicibacter</i> sp. TrichCH4B
Sst-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sagittula stellata</i> E-37
Smu-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Salipiger mucosus</i> DSM 16094
Sna-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sedimentitalea nanhaiensis</i> DSM 24252
Sqi-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sediminimonas qiaohouensis</i> DSM 21189
Sdo-1-1 to Sdo-1-2	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter donghicola</i> DSW-25 = KCTC 12864 = JCM 14565
Sge-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter geojensis</i>
Sgu-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter guttiformis</i> KCTC 32187
Sme-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter mediterraneus</i>
Sme-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter mediterraneus</i> KCTC 32188
Sno-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter noctilucae</i>
Sno-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter noctilucicola</i>
Spo-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter pontiacus</i> 3SOLIMAR09
Sps-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter pseudonitzschiae</i>
Ssp-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter</i> sp. 20.GPM-1509m
Ssp-3-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter</i> sp. CB2047

Ssp-4-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter</i> sp. EE-36
Ssp-5-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Sulfitobacter</i> sp. NAS-14.1
Tsp-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Tateyamaria</i> sp. ANG-S1
Tar-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Thalassobacter arenae</i> DSM 19593
Tsp-2-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Thalassobacter</i> sp. 16PALIMAR09
Tst-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Thalassobacter stenotrophicus</i>
Tsp-3-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Thalassobium Thalassiobium</i> sp. R2A62
Tat-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Thioclava atlantica</i>
Tda-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Thioclava dalianensis</i>
Tin-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Thioclava indica</i>
Tpa-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Thioclava pacifica</i> DSM 10166
Wma-1-1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Wenzinia marina</i> DSM 24838
Rba-4-1	Bacteria	Proteobacteria	Alphaproteobacteria	<i>Rhodobacterales</i>	<i>bacterium</i>	HTCC2150
Rba-5-1	Bacteria	Proteobacteria	Alphaproteobacteria	<i>Rhodobacterales</i>	<i>bacterium</i>	HTCC2255
Rba-6-1	Bacteria	Proteobacteria	Alphaproteobacteria	<i>Rhodobacterales</i>	<i>bacterium</i>	HTCC2654
Rba-7-1	Bacteria	Proteobacteria	Alphaproteobacteria	<i>Rhodobacterales</i>	<i>bacterium</i>	Y4I
env-1 to env-656	environmental samples					

1.2 Gene contexts

Each L2-Alphaproteobacteria RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one L2-Alphaproteobacteria RNA are assigned a color; other domains are gray. Information about these conserved

domains is given in Section 1.3. The accession of the sequence containing each L2-Alphaproteobacteria RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each L2-Alphaproteobacteria RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 1.1.

abbrev.	Seq. accession		5′ at	3′ at	genes
env-1	SL_3KL_010_SED_10464608	+	263	326	RNA→ RplB (COG0090)rplB (PRK09374)→
Dsh-1-1	NC_009952.1	+	285364	285406	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
Pde-1-1	NC_008686.1	+	746785	746857	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-2	CEVH01071484.1	-	2499	2437	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ rplP (PRK09203)Ribosomal_L16 (pfam00252)→
Aat-2-1	NZ_AQQZ01000010.1	+	3052	3115	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
Rsp-2-1	NZ_ACYY01000029.1	-	40278	40238	RNA→ RplB (COG0090)rplB (PRK09374)→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→ RplP (COG0197)rplP (PRK09203)→
env-3	JGI20154J14316_10014726	+	1330	1394	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→ GIY-YIG_SF (cd00719)GIYc (smart00465)→

Amu-1-1	NZ_JFKE01000006.1	-	218957	218896	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-4	AglaG_F499EG101CWTC2	-	345	276	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-5	AglaG_contig17173	-	368	299	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
Rat-1-1	NZ_AQQW01000010.1	+	2615	2692	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → hypo → 2OG-FeII_Oxy_5 (pfam13759) →
env-6	JGI24724J26744_10003266	-	8748	8659	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-7	JGI24025J20009_10035938	-	1770	1681	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-8	GX8B9KJ01CH3VN	-	334	271	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-9	JGI12109J20283_12362431	+	37	102	RNA →
Tst-1-1	NZ_JGVS01000007.1	+	4252	4317	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Tsp-2-1	NZ_JHAK01000011.1	-	52173	52108	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-10	P_2C_Liq_1_UnCty_1004676	-	3400	3335	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-11	P_2C_Liq_2_UnCty_1000207	-	15707	15642	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-12	P_2C_Liq_2_UnCty_1009999	+	1288	1353	RNA → RplB (COG0090)rplB (PRK09374) →
env-13	ATLU01000110.1	+	1285	1375	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rca-7-1	NZ_AYPZ01000027.1	+	120952	121013	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rca-4-1	NC_014034.1	+	342742	342803	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rca-3-1	NZ_AYQC01000005.1	+	120809	120870	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rca-5-1	NZ_AYQB01000006.1	+	120842	120903	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rca-2-1	NZ_AYPR01000005.1	+	120776	120837	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rca-1-1	NZ_AYQA01000038.1	+	120869	120930	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rsp-4-1	NC_009428.1	-	2571487	2571448	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rsp-5-1	NC_009049.1	+	387361	387400	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →

Rsp-6-1	NC_011963.1	+	19443	19482	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rsp-7-1	NZ_CM001161.1	+	2879562	2879601	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rsp-3-1	NC_007493.2	+	309766	309805	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-14	JQGR01000094.1	+	4628	4725	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-15	4455295.3.316264	+	69	130	RNA → RplB (COG0090)rplB (PRK09374) →
env-16	AYRF01032015.1	+	99	189	RNA → ←-hypo
env-17	3300000052_005679	+	305	368	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (PRK09203)Ribosomal_L16 (pfam00252) →
Sqi-1-1	NZ_AUIJ01000004.1	-	73400	73337	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → RpsQ (COG0186)rpsQ (PRK05610) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08881)Ribosomal_S14 (pfam00253) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → RplR (COG0256)rplR (PRK05593) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) →
env-18	AYRH01014365.1	-	242	152	RNA → RplB (COG0090)rplB (PRK09374) →
env-19	JCVI_READ_1105499881630	-	824	763	RNA → RplB (COG0090)rplB (PRK09374) →
env-20	JCVI_SCAF_1101668060777	+	269	332	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
Hsp-1-1	NZ_JWIE01000061.1	+	80663	80737	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Hna-1-1	NZ_JWIF01000023.1	-	41827	41752	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rba-6-1	NZ_CH902578.1	-	2097076	2096975	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-21	CENL01121776.1	+	1754	1825	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Cba-1-1	NZ_AMRK01000018.1	+	2718	2789	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
Rsp-1-1	NZ_ANFS01000015.1	+	2126	2188	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-22	JGI24724J26744_10214823	+	124	189	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-23	NCBI_READ_1112637934486	+	240	306	RNA → RplB (COG0090)rplB (PRK09374) →
env-24	CESE01117110.1	-	1184	1118	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-25	CEST01016851.1	+	2161	2227	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-26	2236876009_187088	+	204	270	RNA → RplB (COG0090)rplB (PRK09374) →
env-27	DelMOSum2010_c10002940	-	12329	12263	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →

env-28	JGI20152J14361_10100075	-	149	83	RNA → RplB (COG0090)rplB (PRK09374) →
env-29	JGI20151J14362_10028856	+	2610	2676	RNA → RplB (COG0090)rplB (PRK09374) →
env-30	JGI20154J14316_10002806	+	4976	5042	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-31	JGI20160J14292_10200265	+	405	471	RNA → RplB (COG0090)rplB (PRK09374) →
env-32	JGI20153J14295_10377309	-	117	51	RNA → hypo →
env-33	JGI20153J14318_10377309	-	117	51	RNA → hypo →
env-34	JGI20157J14317_10000107	-	35008	34942	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-35	CEUP01061385.1	-	473	377	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
Csp-1-1	NZ_AJKJ01000048.1	+	3267	3349	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) → hypo → hypo →
Pat-1-1	NZ_AQXQ01000010.1	-	63842	63774	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rba-3-1	NZ_KN714899.1	-	63316	63257	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-36	JGI24025J20009_10174089	+	339	403	RNA → RplB (COG0090)rplB (PRK09374) →
env-37	CEQG01114380.1	-	89	29	RNA →
Rca-6-1	NZ_AYPY01000003.1	-	128998	128937	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-38	JGI24723J26617_10335773	-	212	147	RNA → RplB (COG0090)rplB (PRK09374) →
env-39	JGI24724J26744_10397626	+	94	159	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-40	JGI24723J26617_10265371	+	184	249	RNA → RplB (COG0090)rplB (PRK09374) →
Oba-1-1	NZ_CH724131.1	-	1639797	1639719	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-41	JGI12210J13797_10911808	-	154	79	RNA → RplB (COG0090)rplB (PRK09374) →
env-42	SA_S1_NOR08_45m_c10088539	-	163	103	RNA → RplB (COG0090)rplB (PRK09374) →
env-43	SA_S1_NOR05_45m_c10012273	+	805	865	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → KH (smart00322)30S_S3_KH (cd02412) →
env-44	SA_S2_NOR15_50m_c10022560	-	1787	1727	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-45	KGL_S2_ANT05_2345m_c1008115	+	360	420	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-46	KGL_S1_ANT02_95m_c10175114	-	173	113	RNA → RplB (COG0090)rplB (PRK09374) →
env-47	SA_S2_NOR13_50m_c1107468	-	300	240	RNA → RplB (COG0090)rplB (PRK09374) →
env-48	KGL_S1_ANT03_95m_c1050218	+	27	87	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-49	JGI24723J26617_10562187	-	219	156	RNA → RplB (COG0090)rplB (PRK09374) →
env-50	JGI24724J26744_10017014	-	875	812	RNA → RplB (COG0090)rplB (PRK09374) →
env-51	JGI24025J20009_10010867	-	4900	4837	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-52	KGL_S1_ANT01_95m_c10003918	+	2539	2601	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-53	KGL_S2_ANT05_2345m_c1031605	-	159	97	RNA → RplB (COG0090)rplB (PRK09374) →
env-54	KGL_S1_ANT02_95m_c10012913	+	2664	2726	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →

env-55	AGBJ01004298.1	-	284	223	RNA → ←-hypo
env-56	JGI24025J20009_10035212	-	340	279	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-57	LGVE01157751.1	+	1200	1261	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-58	LGVF01211244.1	-	1626	1565	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-59	LGVD01030433.1	+	391	452	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-60	SA_S1_NOR08_45m_c10143553	+	557	618	RNA → RplB (COG0090)rplB (PRK09374) →
env-61	SA_S2_NOR15_50m_c10181039	-	134	73	RNA → RplB (COG0090)rplB (PRK09374) →
env-62	SA_S1_NOR02_45m_c1048433	-	379	318	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-63	SA_S2_NOR18_50m_1043735	+	332	393	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-64	LGOV01019582.1	+	657	718	RNA → RplB (COG0090)rplB (PRK09374) →
Rli-1-1	NC_015730.1	-	3449426	3449359	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-65	JGI12109J20283_10879218	-	201	135	RNA → RplB (COG0090)rplB (PRK09374) →
Rde-1-1	NC_008209.1	+	1346820	1346887	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-66	JGI11958J13698_1070723	-	120	52	RNA → ←-hypo
env-67	CAM_READ_0234679589	-	364	296	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-68	CAM_READ_0234796905	-	364	296	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
Rsp-15-1	NZ_JQLS01000008.1	+	336402	336479	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-69	CESQ01192690.1	-	546	470	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
Rsp-14-1	NZ_DS022276.1	-	423367	423284	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-70	CETR01181359.1	-	335	252	RNA → RplB (COG0090)rplB (PRK09374) →
env-71	JGI11800J13271_1007151	+	1158	1250	RNA →
Csp-2-1	NZ_GG704599.1	+	399690	399782	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-72	P_2C_Liq_1_UnCty_1008935	-	2463	2386	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rplP (PRK09203)Ribosomal_L16 (pfam00252) →
env-73	P_2C_Liq_2_UnCty_1004597	+	433	510	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rplP (PRK09203)Ribosomal_L16 (pfam00252) →
Nig-1-1	NZ_CVPC01000014.1	-	4708	4631	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-74	JGI12273J12029_10524331	+	216	286	RNA →
env-75	JGI24025J20009_10000374	-	31294	31182	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-76	JGI24025J20009_10010033	+	1689	1756	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Tsp-1-1	NZ_JWLL01000009.1	-	233099	233024	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-77	2236876003_101132	+	388	448	RNA → RplB (COG0090)rplB (PRK09374) →

env-78	PML_READ_00355505	+	143	210	RNA→
env-79	JGI20152J14361_10000074	+	12924	12991	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→ hypo→
env-80	JGI20154J14316_10160884	+	228	295	RNA→ rplB (PRK09374)Ribosomal_L2 (pfam00181)→
env-81	JGI20153J14295_10001123	+	7148	7215	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→ hypo→
env-82	JGI20153J14318_10001123	+	7148	7215	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→ hypo→
Lve-2-1	NZ_CH672414.1	+	2669496	2669565	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
Lve-1-1	NZ_KB907973.1	+	38196	38265	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-83	JGI12210J13797_10455319	+	174	245	RNA→
env-84	JGI12210J13797_10023293	-	122	51	RNA→ ←hypo
Ogr-1-1	NZ_CH724107.1	-	1761097	1761017	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ RplV (COG0091)rplV (PRK00565)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-85	JCVL_SCAF_1096627353865	+	440	504	RNA→ RplB (COG0090)rplB (PRK09374)→ Zw10 (pfam06248)→ rpsS (PRK00357)RpsS (COG0185)→ hypo→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→
env-86	PR_CR_10.Liq_1.inCR_1002101	+	720	784	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-87	PR_CR_10.Liq_3.inCR_1034197	-	612	548	RNA→ RplB (COG0090)rplB (PRK09374)→
Lsp-10-1	NZ_JXYE01000005.1	-	18000	17935	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-88	Antartic2_1216799	+	177	241	RNA→ RplB (COG0090)rplB (PRK09374)→
env-89	JGI25920J50251_10282450	-	274	210	RNA→ ←hypo
Aat-1-1	NZ_AQY01000002.1	+	4134	4211	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-90	HLSNC_1002228	-	3054	2987	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→ hypo→
env-91	KVRMV2_106490902	+	59	134	RNA→ RplB (COG0090)rplB (PRK09374)→
env-92	GYQO9XB02HJOI1	-	85	21	RNA→ ←hypo
env-93	4455295.3.416243	+	77	139	RNA→ rplB (PRK09374)Ribosomal_L2 (pfam00181)→
env-94	JGI20152J14361_10000792	-	16131	16066	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-95	JGI20152J14361_10021758	+	662	727	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→
Pna-1-1	NZ_JHZF01000011.1	-	1853666	1853592	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-96	C687J26610_1065482	-	330	262	RNA→ rplB (PRK09374)Ribosomal_L2 (pfam00181)→
Sna-1-1	NZ_KI421509.1	-	2029881	2029817	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→ TIGR02466 (TIGR02466)→
env-97	GYQO9XB02GIUBI	+	54	123	RNA→
env-98	DCrCPGB.c116271	+	75	144	RNA→ rplB (PRK09374)Ribosomal_L2 (pfam00181)→

env-99	KGLS2_ANT04.2345m.c1008211	-	1538	1465	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-100	KGLS1_ANT02.95m.c10000174	+	24541	24614	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-101	KGLS1_ANT01.95m.c10002670	+	4835	4908	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-102	KGLS2_ANT05.2345m.c1002025	-	4049	3976	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-103	SR_TP_S13sol.1015872	-	193	120	RNA → RplB (COG0090)rplB (PRK09374) →
env-104	HLSNC_1000102	+	4292	4365	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Jsp-1-1	NC_007802.1	+	574447	574519	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-105	KVRMV2_101198589	+	2281	2349	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-106	PR_CR_10.Liq_1.inCR_1005216	-	2908	2842	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-107	PR_CR_10.Liq_3.inCR_1001525	-	3425	3359	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-108	GSLSAAL.contig03181	+	626	692	RNA →
env-109	ElkS_mat_CD2A_1005801	-	1817	1752	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-110	ElkS_mat_MD6A_1013394	+	164	229	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-111	JGI12210J13797_11132003	+	2467	2532	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-112	JGI12210J13797_11132005	-	3162	3097	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-113	JGI11876J14442_10003279	-	3251	3186	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-114	JGI12109J20283_10578297	+	2553	2618	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-115	JGI12109J20283_10578298	-	338	273	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-116	JGI12210J13797_11558909	+	43	103	RNA → ←-hypo
env-117	JGI12210J13797_11938347	-	70	10	RNA → ←-hypo
env-118	CENR01018324.1	+	1102	1170	RNA → RplB (COG0090)rplB (PRK09374) →
env-119	CENV01010391.1	-	2234	2166	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → RplV (COG0091)rplV (PRK00565) → RpsC (COG0092)rpsC (PRK00310) →
env-120	CERO01013343.1	+	295	363	RNA → RplB (COG0090)rplB (PRK09374) →
env-121	JGI24724J26744_10870797	+	32	99	RNA → RplB (COG0090)rplB (PRK09374) →
env-122	JGI12210J13797_10838428	-	914	850	RNA → RplB (COG0090)rplB (PRK09374) →
env-123	JGI12210J13797_10838429	+	87	151	RNA → RplB (COG0090)rplB (PRK09374) →
env-124	JGI20152J14361_10179686	+	269	339	RNA → ←-hypo
env-125	SA_S1_NOR08_45m.c10004046	+	4200	4267	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →

env-126	SA_S2_NOR15_50m_c10018770	+	306	373	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-127	SA_S1_NOR05_45m_c10315404	+	255	322	RNA →
Ote-1-1	NZ_CP012160.1	+	252086	252153	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Oan-1-1	NC_020911.1	-	4346201	4346135	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Oar-1-1	NC_020908.1	+	3931342	3931406	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-128	KGI_S1_ANT01_95m_c10350259	-	325	258	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-129	SA_S1_NOR08_45m_c10019190	+	380	447	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rplP (PRK09203)Ribosomal_L16 (pfam00252) →
env-130	KGI_S2_ANT04_2345m_c1106538	-	368	301	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-131	KGI_S2_ANT05_2345m_c1147958	+	34	101	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-132	KGI_S1_ANT03_95m_c1027476	+	53	120	RNA → RplB (COG0090)rplB (PRK09374) →
env-133	KGI_S1_ANT02_95m_c10267034	-	323	256	RNA → RplB (COG0090)rplB (PRK09374) →
env-134	SA_S2_NOR18_50m_1258724	+	183	250	RNA →
env-135	SA_S1_NOR05_45m_c10100002	+	326	393	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
Rsp-9-1	NZ_AAYB01000008.1	+	62353	62420	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-136	JGI24724J26744_10208358	+	330	396	RNA → RplB (COG0090)rplB (PRK09374) →
env-137	JGI24723J26617_10144364	-	304	238	RNA → RplB (COG0090)rplB (PRK09374) →
Pan-1-1	NZ_LGHU01000123.1	+	98116	98182	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Pfe-1-1	NZ_LGHV01000017.1	-	8115	8049	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Pfe-2-1	NZ_ATVN01000032.1	-	7903	7837	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Lci-1-1	NZ_BATB01000009.1	-	87402	87331	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → hypo → RplP (COG0197)rplP (PRK09203) →
env-138	JGI24724J26744_10487725	+	233	347	RNA → ← hypo
Abo-1-1	NZ_LJXH01000044.1	-	31116	31026	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rha-1-1	NZ_JALZ01000013.1	+	2420	2528	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → hypo → 2OG-FelL_Oxy_5 (pfam13759) →
Mal-1-1	NZ_JSUQ01000002.1	-	319288	319208	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-139	JGI12075J13256_1001549	+	1682	1762	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-140	JGI12112J13074_1001921	-	771	691	RNA → RplB (COG0090)rplB (PRK09374) →

env-141	JGI24724J26744_10066135	-	1234	1166	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-142	JGI24723J26617_10483647	+	129	197	RNA → RplB (COG0090)rplB (PRK09374) →
env-143	JCVL_SCAF_1101667320527	-	473	406	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-144	APMI01028553.1	-	2484	2421	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rplP (PRK09203)Ribosomal_L16 (pfam00252) →
env-145	JGI24724J26744_10205793	-	600	536	RNA → RplB (COG0090)rplB (PRK09374) →
env-146	JGI25321J39296_1078939	-	191	127	RNA → RplB (COG0090)rplB (PRK09374) →
env-147	JGI25321J50212_10013221	-	2584	2520	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-148	JGI24025J20009_10017180	+	442	544	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-149	ATLU01001954.1	+	1098	1219	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-150	JGI12210J13797_10050283	+	46	137	RNA → RplB (COG0090)rplB (PRK09374) →
env-151	JGI12210J13797_10199298	-	104	13	RNA →
env-152	JGI11876J14442_10101235	-	251	160	RNA → RplB (COG0090)rplB (PRK09374) →
env-153	JGI12109J20283_10360159	-	6078	5987	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-154	JGI12109J20283_10360162	+	86	177	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-155	ElkS_mat_MD6A_1245876	+	17	108	RNA → RplB (COG0090)rplB (PRK09374) →
env-156	3300001605_10196433	+	760	822	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-157	JGI24723J26617_10002649	-	2300	2237	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-158	SA_S1_NOR05_45m_c10038069	-	1091	1029	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) →
env-159	SA_S1_NOR08_45m_c10005006	-	2877	2815	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-160	SA_S2_NOR15_50m_c10038301	+	1693	1755	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-161	SA_S1_NOR02_45m_c1051392	-	97	35	RNA →
env-162	KGL_S1_ANT01_95m_c10509536	-	192	130	RNA → RplB (COG0090)rplB (PRK09374) →
Kvu-1-1	NC_017384.1	-	2210425	2210363	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Kvu-2-1	NC_014625.1	-	2496662	2496600	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-163	JGI24723J26617_10010575	-	238	176	RNA → RplB (COG0090)rplB (PRK09374) →
Lho-1-1	NZ_KB822996.1	+	454151	454214	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
CRh-1-1	NZ_LFTY01000002.1	+	138295	138372	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-164	CETY01316910.1	+	295	359	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-165	SI34jun09_120m_1114364	+	319	383	RNA →
Ogu-1-1	NZ_AMGO01000054.1	+	2304	2368	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-166	_GX4IIKE02G7TTM	+	176	245	RNA → RplB (COG0090)rplB (PRK09374) →
Paq-1-1	NZ_LGHS01000007.1	-	43447	43382	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →

env-167	CERE01101430.1	+	2524	2585	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-168	ATLU01000020.1	+	4112	4189	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-169	CERH01017500.1	-	305	240	RNA → RplB (COG0090)rplB (PRK09374) →
Rnu-1-1	NZ_CH724156.1	-	347220	347155	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → RplV (COG0091)rplV (PRK00565) → RpsC (COG0092)rpsC (PRK00310) →
env-170	CEQZ01016289.1	-	1777	1712	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-171	KVRMV2_100592709	+	54	115	RNA → RplB (COG0090)rplB (PRK09374) →
env-172	2236876011_238237	+	256	328	RNA → ← hypø
Rba-4-1	NZ_AAXZ01000001.1	+	629695	629767	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
env-173	JCVL_SCAF_1096628174387	+	532	596	RNA → RplB (COG0090)rplB (PRK09374) → rpsC (PRK00310)Ribosomal_S3_C (pfam00189) → RplP (COG0197)rplP (PRK09203) →
Sps-1-1	NZ_JAMD01000003.1	-	509244	509179	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Ssp-2-1	NZ_JIBC01000009.1	+	270672	270737	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-174	JGI24723J26617_10018613	+	746	824	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rplP (PRK09203)Ribosomal_L16 (pfam00252) →
Osp-1-1	NZ_JAFT01000005.1	-	653626	653563	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Sst-1-1	NZ_AAYA01000001.1	+	200930	200993	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
env-175	JCVL_READ_1103242074397	+	704	765	RNA →
env-176	JGI24724J26744_10049941	+	488	552	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → hypø →
Rsp-16-1	NZ_ABCL01000006.1	+	350229	350292	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
env-177	JGI24724J26744_10021376	+	90	155	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-178	3300001592_10000630	+	2376	2441	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → KH (smart00322)30S_S3_KH (cd02412) → rpsC (PRK00310)Ribosomal_S3_C (pfam00189) → RplP (COG0197)rplP (PRK09203) →
env-179	JGI25317J35169_1006515	+	816	879	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-180	JGI25319J35699_1002819	+	816	879	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →

env-181	JGI25322J35698_1003836	+	3368	3431	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-182	JGI25318J35512_1004712	+	816	879	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-183	JGI25321J39296_1001477	-	10112	10049	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-184	JGI25320J50211_1001516	-	2747	2684	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-185	JGI25321J50212_10005715	-	4273	4210	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-186	JGI24724J26744_10053916	+	237	300	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
Rsp-13-1	NZ_CH902584.1	+	1991396	1991459	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-187	CERE01077594.1	+	40	103	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
Rmu-1-1	NZ_KN293980.1	+	258018	258081	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-188	GSLAS_GLMUJHB01ANH3P	-	111	36	RNA → ←-hypo
env-189	PR_CR_10.Liq_1.inCR_1002975	-	4609	4543	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-190	GSLAS_contig20752	+	91	157	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-191	GSLSAALGFP0ZZ301AT1AJ	+	118	184	RNA → RplB (COG0090)rplB (PRK09374) →
env-192	P_2C.Liq_2.UnCty_1112442	+	202	268	RNA → RplB (COG0090)rplB (PRK09374) →
env-193	JCVL_SCAF_1101668363300	-	793	725	RNA → RplB (COG0090)rplB (PRK09374) →
env-194	CESM01031007.1	+	3318	3386	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) → RplP (COG0197)rplP (PRK09203) →
env-195	LPaug09P1610m.c1075736	-	346	278	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-196	CENZ01075739.1	-	473	405	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-197	JCVL_SCAF_1096627291439	+	336	404	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-198	CERM01028656.1	+	736	804	RNA → RplB (COG0090)rplB (PRK09374) →
env-199	CEWO01045537.1	+	245	313	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-200	CEVX01073106.1	+	997	1065	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-201	CEUB01117696.1	+	96	164	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-202	CEUG01069584.1	-	338	270	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-203	CEVF01073172.1	-	937	869	RNA → RplB (COG0090)rplB (PRK09374) →
env-204	CEQW01075709.1	+	117	185	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-205	CESW01144144.1	-	3772	3704	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-206	CERG01046692.1	-	1707	1639	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-207	CENJ01096940.1	+	1807	1875	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-208	CESN01179177.1	-	635	567	RNA → RplB (COG0090)rplB (PRK09374) →

env-209	CESP01157305.1	-	3522	3454	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-210	CEVU01049360.1	+	90	158	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-211	CEVX01093179.1	+	444	512	RNA →
env-212	CEWK01264123.1	+	1805	1873	RNA → ←-hypo
env-213	CENP01218092.1	-	190	122	RNA → ←-hypo
env-214	CEVP01021979.1	+	1007	1075	RNA → ←-hypo
env-215	JCVI_READ_1103242821391	+	471	539	RNA → RplB (COG0090)rplB (PRK09374) →
env-216	JCVI_SCAF_1101668667046	+	950	1018	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-217	CETT01105554.1	+	279	347	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-218	CEUU01047001.1	+	1170	1238	RNA → ←-hypo
env-219	CEPA01032629.1	-	488	420	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-220	JGI24820J26691_1001055	-	5955	5887	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-221	CEVE01064005.1	+	149	217	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (PRK00310)30S_S3_KH (cd02412) →
env-222	JCVI_SCAF_1096627794593	-	1348	1280	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-223	JCVI_SCAF_1096627334841	+	695	763	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-224	JCVI_SCAF_1101668673697	+	999	1067	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-225	CEUQ01027845.1	-	417	349	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-226	CEUK01022496.1	+	194	262	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-227	JCVI_SCAF_1101668339934	-	213	145	RNA →
env-228	2236876001_088379	+	363	434	RNA → RplB (COG0090)rplB (PRK09374) →
env-229	JCVI_READ_1103769037343	+	211	279	RNA → RplB (COG0090)rplB (PRK09374) →
env-230	JCVI_READ_1103769614257	+	956	1021	RNA → ←-hypo
env-231	CEWK01092565.1	+	421	489	RNA →
env-232	CENQ01040580.1	+	79	147	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-233	CEVN01064966.1	-	373	305	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-234	CEPL01019978.1	+	61	129	RNA → hypo → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-235	CEPU01001285.1	+	124	192	RNA → RplB (COG0090)rplB (PRK09374) →
env-236	JCVI_READ_1103769096640	-	624	556	RNA → RplB (COG0090)rplB (PRK09374) →
env-237	CENO01039587.1	-	4337	4269	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-238	CENW01212150.1	-	201	133	RNA →
env-239	CEOJ01093429.1	-	167	99	RNA →
env-240	CEOS01129456.1	+	419	487	RNA → RplB (COG0090)rplB (PRK09374) →
env-241	CEOV01114312.1	-	112	44	RNA →
env-242	CEOW01046858.1	+	2221	2289	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-243	CEPB01039107.1	+	1192	1260	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-244	CEPC01014332.1	+	2318	2386	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-245	CEVG01269443.1	+	380	448	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-246	CEVY01099477.1	+	2626	2694	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-247	CEQD01048550.1	-	1102	1034	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →

env-248	CEOC01035558.1	+	378	446	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-249	CEQM01116065.1	+	207	275	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-250	CEWA01125852.1	-	329	261	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-251	CEWO01164779.1	-	401	333	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-252	CENG01071547.1	-	1142	1074	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) →
env-253	CENJ01189867.1	-	96	28	RNA →
env-254	CENU01109952.1	+	428	496	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-255	CEVW01291667.1	-	97	29	RNA →
env-256	CAM_READ_0234711973	+	389	459	RNA → ←-hypo
env-257	JCVL_SCAF_1096626302357	-	446	378	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-258	CESA01208526.1	+	115	183	RNA → RplB (COG0090)rplB (PRK09374) →
env-259	JGI24723J26617_10000490	-	34468	34404	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rsp-8-1	NZ_ABCR01000011.1	+	18945	19019	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
env-260	CENP01298067.1	-	497	434	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-261	SI34jun09_10m_1176238	-	203	140	RNA → RplB (COG0090)rplB (PRK09374) →
env-262	CESO01033516.1	-	891	828	RNA → RplB (COG0090)rplB (PRK09374) →
env-263	2236876002_126045	-	189	126	RNA → RplB (COG0090)rplB (PRK09374) →
env-264	JGI20151J14362_10250213	-	362	299	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-265	CENZ01260479.1	+	344	407	RNA → RplB (COG0090)rplB (PRK09374) →
env-266	2236876002_106467	-	167	104	RNA → RplB (COG0090)rplB (PRK09374) →
env-267	CENT01014152.1	+	496	559	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-268	CERM01014689.1	-	2838	2775	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-269	CENN01049021.1	+	1200	1263	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-270	CESS01003967.1	-	3048	2985	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-271	JGI20158J14315_10236147	-	342	279	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-272	DelMOWin2010_c10431137	+	54	117	RNA → RplB (COG0090)rplB (PRK09374) →
env-273	JCVL_SCAF_1096628356459	-	1073	1010	RNA → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-274	JCVL_READ_1103769101289	-	925	866	RNA → RplB (COG0090)rplB (PRK09374) →
env-275	JCVL_SCAF_1096627271074	+	1225	1289	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-276	JCVL_READ_1108799738541	-	650	586	RNA → RplB (COG0090)rplB (PRK09374) →
env-277	JCVL_SCAF_1096627976978	+	67	130	RNA → RplB (COG0090)rplB (PRK09374) →
env-278	CEWK01197169.1	-	120	57	RNA →
env-279	CESM01101386.1	-	277	213	RNA → ←-hypo
env-280	CEUH01138205.1	+	837	901	RNA →
env-281	CEWG01043024.1	+	1807	1871	RNA → RplB (COG0090)rplB (PRK09374) →
env-282	CENF01097607.1	+	586	650	RNA →
env-283	CEUG01060018.1	-	123	59	RNA →
env-284	CEQW01039727.1	-	82	18	RNA →
env-285	JGI24820J26691_1324391	+	37	101	RNA → ←-hypo
env-286	CESM01340684.1	-	97	33	RNA →
env-287	JCVL_SCAF_1096627811062	-	972	908	RNA → RplB (COG0090)rplB (PRK09374) →
env-288	JGI24820J26691_1087074	+	510	574	RNA → hypo →

env-289	JCVL_SCAF_1096627081604	-	1775	1711	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-290	JCVL_SCAF_1096627977260	+	343	407	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-291	CEPJ01112005.1	+	720	784	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-292	CAM_READ_0232770725	-	286	222	RNA → RplB (COG0090)rplB (PRK09374) →
env-293	CAM_READ_0232288387	-	248	184	RNA → hypo →
env-294	JCVL_READ_1108800192449	+	288	352	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-295	JCVL_SCAF_1096627092934	+	576	640	RNA → RplB (COG0090)rplB (PRK09374) →
env-296	JCVL_SCAF_1096627099260	+	352	416	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-297	JGI24820J26691_1028973	+	1055	1119	RNA →
env-298	CEUV01003215.1	+	768	832	RNA →
env-299	CEUQ01156669.1	-	85	21	RNA →
env-300	JCVL_SCAF_1101667251435	-	166	102	RNA → hypo →
env-301	CENF01068770.1	-	88	24	RNA →
env-302	CEOM01237289.1	+	465	529	RNA →
env-303	CERW01142606.1	+	975	1039	RNA →
env-304	CEVS01036929.1	-	88	24	RNA →
env-305	CEVU01131676.1	+	1938	2002	RNA →
env-306	CEVX01017747.1	-	2836	2772	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-307	CEWO01083412.1	+	3433	3497	RNA → RplB (COG0090)rplB (PRK09374) →
env-308	JCVL_SCAF_1096627863534	-	717	653	RNA → RplB (COG0090)rplB (PRK09374) →
env-309	JCVL_SCAF_1101668429250	+	407	471	RNA → RplB (COG0090)rplB (PRK09374) →
env-310	JCVL_SCAF_1101668671537	-	1477	1413	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) → rplB (PRK09374)Ribosomal_L2_C (pfam03947) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-311	CETT01040907.1	-	3530	3466	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-312	JCVL_READ_1103242680220	-	329	265	RNA → RplB (COG0090)rplB (PRK09374) →
env-313	JCVL_SCAF_1101668723498	+	490	554	RNA → RplB (COG0090)rplB (PRK09374) →
env-314	JCVL_READ_1108800250675	-	813	749	RNA → RplB (COG0090)rplB (PRK09374) →
env-315	JCVL_SCAF_1101667072466	-	232	168	RNA →
env-316	JCVL_READ_1104230004824	+	69	133	RNA → RplB (COG0090)rplB (PRK09374) →
env-317	CEPU01102359.1	-	315	251	RNA → RplB (COG0090)rplB (PRK09374) →
env-318	JCVL_READ_1104230151507	-	139	75	RNA →
env-319	JCVL_SCAF_1096626924486	-	857	793	RNA → RplB (COG0090)rplB (PRK09374) →
env-320	CEQD01002240.1	+	207	271	RNA → RplB (COG0090)rplB (PRK09374) →
env-321	JCVL_SCAF_1101668260309	-	1155	1091	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-322	CEWK01132454.1	+	1102	1166	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-323	CETB01173647.1	+	105	169	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-324	CENY01053602.1	+	393	457	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-325	JCVL_READ_1108799747928	+	140	204	RNA → RplB (COG0090)rplB (PRK09374) →
env-326	JCVL_SCAF_1096627704005	-	1325	1261	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-327	JCVL_SCAF_1101668170846	-	710	646	RNA → RplB (COG0090)rplB (PRK09374) →
env-328	CEVY01136175.1	+	444	508	RNA →
env-329	CAM_READ_0072915149	+	365	429	RNA →
env-330	JCVL_READ_1103180852614	-	134	70	RNA →
env-331	CETS01117025.1	+	341	405	RNA →
env-332	CEUJ01061937.1	-	283	219	RNA → RplB (COG0090)rplB (PRK09374) →

env-333	CEVE01027800.1	-	84	20	RNA→
env-334	CEWJ01004911.1	-	89	25	RNA→
env-335	CEWH01205319.1	+	544	608	RNA→
env-336	JCVL_SCAF_1096627835679	-	1455	1391	RNA→ RplB (COG0090)rplB (PRK09374)→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→
env-337	JCVL_SCAF_1096627978139	-	713	649	RNA→ RplB (COG0090)rplB (PRK09374)→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→
env-338	JCVL_SCAF_1096628267383	+	720	784	RNA→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→
env-339	JCVL_SCAF_1096627226171	-	356	292	RNA→ rplB (PRK09374)Ribosomal_L22 (pfam00181)→
env-340	CESB01055415.1	+	1248	1312	RNA→ RplB (COG0090)rplB (PRK09374)→
env-341	JCVL_SCAF_1101668333168	+	132	196	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→
env-342	CEVZ01074731.1	+	606	670	RNA→
env-343	JCVI_READ_1108829670529	-	825	762	RNA→ RplB (COG0090)rplB (PRK09374)→
env-344	JCVL_SCAF_1101668663947	-	95	31	RNA→
env-345	JCVI_READ_1103242633429	+	739	803	RNA→
env-346	JCVL_SCAF_1101668342543	-	593	529	RNA→ RplB (COG0090)rplB (PRK09374)→
env-347	CENF01127799.1	+	676	740	RNA→
env-348	CEQO01040664.1	-	501	437	RNA→ rplB (PRK09374)Ribosomal_L22 (pfam00181)→
env-349	CEQW01046424.1	+	1679	1743	RNA→ ←-hypo
env-350	CEQY01100769.1	-	387	323	RNA→ rplB (PRK09374)Ribosomal_L22 (pfam00181)→
env-351	CERR01085567.1	+	474	538	RNA→
env-352	CETI01093028.1	-	91	27	RNA→
env-353	CEVU01103598.1	-	85	21	RNA→
env-354	CEVX01107346.1	+	461	525	RNA→
env-355	CEWB01023124.1	+	120	184	RNA→ rplB (PRK09374)Ribosomal_L22 (pfam00181)→
env-356	JCVL_SCAF_1096627339121	-	1737	1673	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ rpsC (PRK00310)30S_S3_KH (cd02412)→ RNA→ rplB (PRK09374)Ribosomal_L22 (pfam00181)→
env-357	JCVL_SCAF_1101667362029	+	16	80	RNA→ RplB (COG0090)rplB (PRK09374)→
env-358	CETP01093824.1	+	77	141	RNA→ RplB (COG0090)rplB (PRK09374)→
env-359	CEUU01096110.1	-	95	31	RNA→
env-360	JCVL_SCAF_1101668661533	-	618	555	RNA→ RplB (COG0090)rplB (PRK09374)→
env-361	JCVL_SCAF_1101668691223	-	229	166	RNA→ RplB (COG0090)rplB (PRK09374)→
Psp-3-1	NZ_LDPY01000001.1	+	1628103	1628171	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
Hmi-1-1	NZ_JFGS01000025.1	-	34255	34184	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→ MhpC (COG0596)Abhydrolase_6 (pfam12697)→ MhpC (COG0596)Abhydrolase_6 (pfam12697)→
Hma-1-1	NZ_JGYG01000018.1	-	57450	57378	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→ MhpC (COG0596)Abhydrolase_6 (pfam12697)→
Laq-1-1	NZ_KI421504.1	+	1151633	1151741	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-362	JGI24723J26617_10003411	-	7982	7888	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
Rpo-1-1	NC_003911.12	+	487501	487565	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-363	CETY01001211.1	-	2221	2155	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→
env-364	JGI24023J19991_10525132	-	195	105	RNA→ RplB (COG0090)rplB (PRK09374)→

Sla-1-1	NZ_GG704596.1	+	1508433	1508499	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
Rha-2-1	NZ_JQEZO1000002.1	-	890631	890567	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rsp-17-1	NZ_LGXZ01000018.1	-	15524	15460	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rsp-18-1	NZ_JWLJ01000003.1	+	9098	9163	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rsp-19-1	NZ_JWLK01000001.1	+	450619	450684	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rsp-22-1	NZ_AEYW01000001.1	+	6172	6237	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
Rba-2-1	NZ_DS999531.1	+	702885	702950	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
env-365	KGL_S1_ANT01.95m.c10129328	+	275	337	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-366	KGL_S1_ANT02.95m.c10007513	+	664	726	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → hypo → M20_Acy1 (cd03886)amidohydrolases (TIGR01891) →
env-367	KGL_S2_ANT04.2345m.c1167548	+	316	378	RNA → ← hypo
env-368	JGI24723J26617_10802083	+	118	180	RNA → rplW (PRK05738) →
env-369	JGI12109J20283_10872926	-	175	77	RNA → hypo →
env-370	JGI12109J20283_10006735	-	753	682	RNA → RplB (COG0090)rplB (PRK09374) →
env-371	JGI12109J20283_10006736	+	78	149	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-372	HLSNC_1001521	-	9879	9807	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → QdoI (COG1917)DMSP_lyase (pfam16867) → 2OG-FeII_Oxy_5 (pfam13759) →
env-373	KGL_S2_ANT06.2345m.c1009878	-	2821	2753	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-374	KGL_S2_ANT04.2345m.c1010869	-	2778	2711	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-375	JGI20153J14295_10082023	-	314	252	RNA → RplB (COG0090)rplB (PRK09374) →
env-376	JGI20153J14318_10082023	-	314	252	RNA → RplB (COG0090)rplB (PRK09374) →
env-377	JGI20159J14440_10153261	+	97	159	RNA → RplB (COG0090)rplB (PRK09374) →
env-378	AMFJ01022780.1	-	134	67	RNA → RplB (COG0090)rplB (PRK09374) →
env-379	ACD54.3	-	1770	1703	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-380	CESJ01069642.1	-	121	57	RNA →
env-381	JGI12109J20283_10580390	-	247	150	RNA → RplB (COG0090)rplB (PRK09374) →
Osp-2-1	NZ_JQMY01000001.1	+	973809	973875	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →

env-382	JGI12396J12026_1059309	+	985	1055	RNA → RplB (COG0090)rplB (PRK09374) →
env-383	JGI12396J12026_1059311	-	316	246	RNA → RplB (COG0090)rplB (PRK09374) →
env-384	JGI12467J12023_1025468	+	360	430	RNA → RplB (COG0090)rplB (PRK09374) →
env-385	JGI12273J12029_10120939	+	462	532	RNA → RplB (COG0090)rplB (PRK09374) →
env-386	JGI12467J12023_1167671	+	157	226	RNA → RplB (COG0090)rplB (PRK09374) →
env-387	JGI12273J12029_10075303	+	308	377	RNA → RplB (COG0090)rplB (PRK09374) →
env-388	JGI12273J12029_10163269	+	383	452	RNA →
Rme-1-1	NZ_KK088521.1	-	243248	243181	RNA → hypo → hypo → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08881)Ribosomal_S14 (pfam00253) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → hypo → rplR (PRK05593)Ribosomal_L18p (pfam00861) →
env-389	JGI12467J12023_1134564	+	240	309	RNA →
env-390	JGI12273J12029_10074910	+	717	786	RNA → RplB (COG0090)rplB (PRK09374) →
env-391	JGI12273J12029_10159171	+	74	143	RNA → RplB (COG0090)rplB (PRK09374) →
env-392	CESO01257586.1	+	654	720	RNA →
env-393	CEVX01283897.1	-	753	687	RNA → RplB (COG0090)rplB (PRK09374) →
env-394	CESM01223547.1	+	62	128	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) →
env-395	JGI26524J50256_1001720	+	3021	3111	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-396	3300001592_10003260	+	2614	2692	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Pxi-1-1	NZ_AUBS01000014.1	+	30482	30560	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rmo-1-1	NZ_JXYG01000033.1	-	76643	76542	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rmo-2-1	NZ_AQCH01000135.1	-	22727	22626	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rsp-21-1	NC_008044.1	+	268831	268932	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Ssp-1-1	NZ_GG703517.1	+	54267	54368	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Psp-1-1	NZ_JSWK01000016.1	-	260767	260659	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Pga-1-1	NC_018286.1	-	3196082	3195974	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Pin-1-1	NZ_KI421498.1	+	3089651	3089759	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Psp-2-1	NZ_JSWJ01000014.1	-	97388	97280	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →

Rsp-11-1	NZ_CH902583.1	+	2863415	2863523	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Par-1-1	NZ_KI421507.1	+	92373	92482	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-397	CAM_READ_0074161329	-	292	213	RNA → RplB (COG0090)rplB (PRK09374) →
env-398	JGI24025J20009_10459630	+	162	240	RNA →
Rsp-12-1	NZ_AAAYC01000008.1	-	172899	172821	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
Lsp-7-1	NZ_JWLH01000015.1	-	13431	13353	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Lsp-1-1	NZ_JWLE01000039.1	-	14129	14051	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Lsp-3-1	NZ_JWLG01000013.1	+	28657	28735	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Lsp-4-1	NZ_JWLI01000007.1	-	341160	341082	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Lsp-6-1	NZ_JWLF01000005.1	-	489868	489790	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Lsp-9-1	NZ_AFCE02000006.1	+	28882	28960	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Lsp-5-1	NZ_JWLM01000001.1	+	28726	28804	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Pga-2-1	NC_018290.1	+	154778	154856	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Nsp-1-1	NZ_LAUK01000016.1	-	42619	42541	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Nit-1-1	NZ_CVRL01000015.1	-	39753	39675	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Nit-1-2	NZ_CVRM01000022.1	+	261598	261676	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Rsp-20-1	NZ_DS999054.1	+	3164594	3164672	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
Lsp-2-1	NZ_JWLC01000007.1	-	265099	265021	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →

Rba-7-1	NZ_DS995281.1	-	3127551	3127473	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
Lca-1-1	NZ_KI421513.1	-	919197	919119	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Lda-1-1	NZ_KI421500.1	-	2486523	2486445	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Lsp-8-1	NZ_JWLD01000017.1	-	20237	20159	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-399	3300001605_10201626	+	440	500	RNA → RplB (COG0090)rplB (PRK09374) →
env-400	3300001239_10025476	+	68	128	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-401	3300001605_10465888	+	68	128	RNA → RplB (COG0090)rplB (PRK09374) →
env-402	3300001605_10229328	-	253	194	RNA → RplB (COG0090)rplB (PRK09374) →
env-403	Antartic2_1036878	-	110	44	RNA → ←-hypo
env-404	CESI01066207.1	+	305	371	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-405	JCVI_SCAF_1096627291198	+	567	632	RNA → RplB (COG0090)rplB (PRK09374) →
env-406	DelMOSum2010_c10000597	+	3357	3422	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-407	DelMOSum2011_c10059128	+	607	672	RNA → RplB (COG0090)rplB (PRK09374) →
env-408	JGI20156J14371_10007799	-	4716	4651	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-409	JGI20154J14316_10019027	+	1070	1135	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-410	JGI20160J14292_10005213	+	2291	2356	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-411	JGI20157J14317_10008243	-	4807	4742	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-412	JGI20159J14440_10014743	-	561	496	RNA → RplB (COG0090)rplB (PRK09374) →
env-413	JGI20155J14468_10115856	+	624	689	RNA → RplB (COG0090)rplB (PRK09374) →
env-414	JGI20153J14295_10306322	-	286	219	RNA → RplB (COG0090)rplB (PRK09374) →
env-415	JGI20153J14318_10306322	-	286	219	RNA → RplB (COG0090)rplB (PRK09374) →
Rel-1-1	NZ_CP004372.1	+	1532613	1532674	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-416	JGI12210J13797_11047960	-	109	48	RNA →
env-417	SA_S1_NOR08_45m_c10022254	+	16	83	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-418	3300001605_10068995	-	547	488	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-419	JGI24768J34885_10007107	+	613	672	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-420	JGI25925J51416_10384036	+	89	148	RNA → RplB (COG0090)rplB (PRK09374) →
env-421	3300001592_10004376	-	13045	12987	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →

Gne-1-1	NZ_KE386949.1	-	572600	572542	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-422	KVRMV2_101642803	+	262	356	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-423	JGI24724J26744_10668225	-	103	15	RNA →
env-424	JGI24723J26617_10025028	+	221	309	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-425	JGI24723J26617_10031254	+	1462	1550	RNA → RplB (COG0090)rplB (PRK09374) →
env-426	JGI24025J20009_10003199	+	1288	1376	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Msp-1-1	NZ_JQEY01000002.1	+	278853	278919	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Sno-1-1	NZ_JASC01000003.1	+	4659	4742	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Sno-2-1	NZ_JASD01000008.1	-	392212	392129	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-427	CEWO01366965.1	+	1207	1273	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-428	wf2_AHAA5765_x1	-	329	263	RNA →
Tin-1-1	NZ_AUNB01000021.1	+	2941	3007	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Pwa-1-1	NZ_LGHT01000042.1	-	148727	148661	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-429	3300001605_10795549	+	347	413	RNA → ←-hypo
env-430	F3OLC3J02I91T9	-	208	142	RNA → hypo →
env-431	3300001605_10634355	-	145	79	RNA →
env-432	TB_FS06.10DRAFT.1000581	+	16462	16528	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-433	3300000052_245369	+	133	199	RNA →
Osp-3-1	NZ_AFPM01000017.1	+	4012	4166	RNA → ←-hypo
env-434	JGI20160J14292_10238378	+	75	140	RNA → hypo → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-435	GYQO9XB02IIO19	-	83	18	RNA →
env-436	JGI24724J26744_10484319	-	357	266	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-437	3300001592_10003340	-	10494	10403	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-438	GSLAS_GLMUJHB01D1RM5	-	167	75	RNA → RplB (COG0090)rplB (PRK09374) →
env-439	JGI24025J20009_10404831	+	123	211	RNA → ←-hypo
Rsp-10-1	NZ_DS999213.1	+	3307378	3307453	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
Tar-1-1	NZ_KE557314.1	-	63321	63252	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-440	JGI12109J20283_11967054	+	55	116	RNA → hypo →

Sme-2-1	NZ_JASH01000010.1	-	261103	261034	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Sme-1-1	NZ_JEMU01000021.1	+	4343	4412	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Tsp-3-1	NZ_GG697169.2	+	2896550	2896617	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
env-441	P_1C_Liq_3_UnCty_1043905	-	143	47	RNA →
env-442	P_2C_Liq_1_UnCty_1002030	+	5317	5413	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-443	P_2C_Liq_2_UnCty_1008969	+	248	344	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-444	P_2C_Liq_2_UnCty_1056800	+	368	464	RNA → RplB (COG0090)rplB (PRK09374) →
env-445	JGI12210J13797_10174589	-	302	232	RNA → RplB (COG0090)rplB (PRK09374) →
env-446	JGI12210J13797_10174590	+	188	258	RNA → RplB (COG0090)rplB (PRK09374) →
Rto-1-1	NZ_LGVV01000034.1	-	33402	33310	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → RplV (COG0091)rplV (PRK00565) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Ris-1-1	NZ_JAME01000033.1	-	54293	54185	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-447	KGI_S1_ANT02_95m.c10357205	+	47	140	RNA → RplB (COG0090)rplB (PRK09374) →
env-448	LADL01003569.1	+	6160	6249	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → RplV (COG0091)rplV (PRK00565) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-449	3300001239_10287636	-	266	177	RNA → RplB (COG0090)rplB (PRK09374) →
env-450	3300001605_10004081	-	3779	3690	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → RplV (COG0091)rplV (PRK00565) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-451	JGI25317J35169_1001357	-	3662	3573	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → RplV (COG0091)rplV (PRK00565) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-452	JGI25319J35699_1000784	-	3894	3805	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → RplV (COG0091)rplV (PRK00565) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-453	JGI25322J35698_1004507	-	4384	4295	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → RplV (COG0091)rplV (PRK00565) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-454	JGI25318J35512_1000721	-	3894	3805	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → RplV (COG0091)rplV (PRK00565) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-455	JGI25321J39296_1001405	+	10390	10479	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → RplV (COG0091)rplV (PRK00565) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-456	JGI25320J50211_1000655	+	15085	15174	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → RplV (COG0091)rplV (PRK00565) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-457	JGI25321J50212_10002409	+	10390	10479	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → RplV (COG0091)rplV (PRK00565) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Tpa-1-1	NZ_AUND01000002.1	+	2906	2974	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → hypo →
env-458	CEVN01086405.1	-	332	264	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
Tat-1-1	NZ_AQRC01000003.1	-	337439	337371	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-459	TFO_HY_Contig_1825	+	253	321	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → KH (smart00322)30S_S3_KH (cd02412) →
env-460	CESE01105678.1	+	551	617	RNA →
env-461	CESI01080217.1	-	93	27	RNA →
env-462	CESU01020394.1	-	93	27	RNA →
env-463	CESJ01170158.1	-	78	12	RNA →

env-464	CEST01002662.1	-	308	242	RNA → RplB (COG0090)rplB (PRK09374) →
env-465	CESI01225209.1	-	91	25	RNA →
env-466	CESU01161643.1	-	91	25	RNA →
env-467	DelMOSum2010_c10465078	-	126	60	RNA → RplB (COG0090)rplB (PRK09374) →
env-468	JGI20157J14317_10424860	+	203	269	RNA → RplB (COG0090)rplB (PRK09374) →
env-469	JGI20152J14361_10060366	+	794	860	RNA → RplB (COG0090)rplB (PRK09374) →
env-470	JGI20151J14362_10458567	+	170	236	RNA → RplB (COG0090)rplB (PRK09374) →
env-471	JGI20157J14317_10486189	+	185	251	RNA →
env-472	CERM01031828.1	-	1160	1094	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) →
env-473	JGI20152J14361_10019476	-	938	873	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) → rplB (PRK09374)Ribosomal.L2.C (pfam03947) →
env-474	JGI20157J14317_10015572	-	3473	3408	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-475	2236876002_042693	-	416	351	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-476	JGI20158J14315_10019288	+	625	691	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) → rplB (PRK09374)Ribosomal.L2.C (pfam03947) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-477	P_2C_Liq_1_UnCty_1012554	+	141	207	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-478	P_2C_Liq_2_UnCty_1004631	+	159	225	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-479	JGI20151J14362_10307003	+	248	314	RNA → hypo →
env-480	JGI20154J14316_10012324	+	1879	1945	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → KH (smart00322)30S_S3_KH (cd02412) → rpsC (PRK00310)Ribosomal_S3_C (pfam00189) → RplP (COG0197)rplP (PRK09203) →
env-481	JGI20160J14292_10120340	-	142	76	RNA →
env-482	JCVL_SCAF_1101668062396	-	504	438	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-483	JGI20156J14371_10029263	-	2057	1991	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-484	JCVL_SCAF_1101667021862	+	537	603	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-485	JCVL_SCAF_1096626884361	-	4210	4144	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-486	JCVL_SCAF_1096627292964	-	129	63	RNA → RplB (COG0090)rplB (PRK09374) →
env-487	DelMOSum2010_c10287456	-	395	329	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-488	DelMOSum2011_c10012372	-	3519	3453	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-489	JGI20153J14295_10009487	-	3477	3411	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-490	JGI20153J14318_10009487	-	3477	3411	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-491	JGI20159J14440_10009403	+	2075	2141	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-492	JGI20155J14468_10011527	+	2004	2070	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Pte-1-1	NZ_CP003984.1	+	2755361	2755427	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal.L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-493	JCVL_SCAF_1101668090558	+	847	913	RNA → RplB (COG0090)rplB (PRK09374) →
env-494	DelMOSum2010_c10054733	-	257	191	RNA → RplB (COG0090)rplB (PRK09374) →

env-495	JGI20151J14362_10072490	-	659	593	RNA → RplB (COG0090)rplB (PRK09374) →
env-496	JGI20160J14292_10100804	-	278	212	RNA → ← hypO
env-497	JGI24724J26744_10002738	-	11069	10947	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-498	JGI24723J26617_10030085	-	1778	1656	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-499	JGI24723J26617_10138499	+	494	616	RNA →
env-500	P_2C_Liq_1_UnCty_1025942	+	228	318	RNA → RplB (COG0090)rplB (PRK09374) →
env-501	P_2C_Liq_2_UnCty_1020991	+	163	253	RNA → RplB (COG0090)rplB (PRK09374) →
env-502	JCVL_SCAF_1096627363432	-	1000	917	RNA → RplB (COG0090)rplB (PRK09374) →
env-503	P_1C_Liq_1_UnCty_1060565	+	89	180	RNA → RplB (COG0090)rplB (PRK09374) →
env-504	P_2C_Liq_1_UnCty_1025617	+	238	329	RNA → RplB (COG0090)rplB (PRK09374) →
env-505	P_2C_Liq_2_UnCty_1030521	+	237	327	RNA → RplB (COG0090)rplB (PRK09374) →
Smu-1-1	NZ_KE557273.1	+	282336	282429	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-506	JGI20154J14316_10000278	-	10091	10028	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08881)Ribosomal_S14 (pfam00253) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) →
env-507	CESJ01079969.1	+	363	426	RNA → RplB (COG0090)rplB (PRK09374) →
env-508	DelMOSum2011_c10084907	-	321	258	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-509	JGI20160J14292_10062109	+	335	398	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-510	CESI01081701.1	-	1672	1609	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-511	CESU01035091.1	-	8481	8418	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08881)Ribosomal_S14 (pfam00253) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) →
env-512	JGI20151J14362_10229901	+	58	122	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-513	2236876002_225186	+	183	247	RNA → RplB (COG0090)rplB (PRK09374) →
env-514	2236876010_0411961	+	127	191	RNA →
env-515	CERM01014667.1	+	479	543	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08881)Ribosomal_S14 (pfam00253) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) →
env-516	2236876009_129660	+	384	447	RNA →
env-517	JGI20160J14292_10014797	+	4611	4675	RNA →
env-518	JGI20157J14317_10244667	+	41	105	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-519	JCVI_READ_1105499001019	-	595	532	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-520	2236876010_0225648	+	55	119	RNA → RplB (COG0090)rplB (PRK09374) →
env-521	2236876011_173305	+	341	406	RNA →

env-522	P_2C_Liq_2_UnCty_1069081	+	299	389	RNA → RplB (COG0090)rplB (PRK09374) →
env-523	P_2C_Liq_1_UnCty_1043093	-	165	75	RNA → RplB (COG0090)rplB (PRK09374) →
env-524	KGI_S2_ANT04_2345m_c1261754	+	93	130	RNA → RplB (COG0090)rplB (PRK09374) →
env-525	JGI24723J26617_10273187	-	116	79	RNA →
env-526	CESU01002408.1	+	477	543	RNA →
Tda-1-1	NZ_JHEH01000004.1	+	3299	3366	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Dsp-1-1	NZ_AYXI01000047.1	+	2274	2353	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-527	JGI24770J26754_10000998	-	16793	16732	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Jaq-1-1	NZ_JYFE01000080.1	-	61937	61870	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Sge-1-1	NZ_JASE01000005.1	-	3545549	3545479	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-528	CESE01069575.1	-	1653	1587	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-529	CEST01031231.1	-	1873	1807	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → KH (smart00322)30S_S3_KH (cd02412) →
env-530	2236876001_338482	-	82	18	RNA → hypo →
env-531	2236876009_222696	-	140	75	RNA → RplB (COG0090)rplB (PRK09374) →
env-532	JGI20152J14361_10053033	+	949	1014	RNA →
env-533	2236876001_438614	-	371	305	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-534	SI34jun09_10m_1003973	-	1624	1559	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-535	CESU01069477.1	-	82	17	RNA →
env-536	DelMOSum2010_c10041356	-	259	194	RNA → RplB (COG0090)rplB (PRK09374) →
env-537	DelMOSum2011_c10032717	-	140	75	RNA →
env-538	SI60aug11_100m_c1018162	-	144	79	RNA →
env-539	SI47jul10_120m_c1099469	+	199	264	RNA → RplB (COG0090)rplB (PRK09374) →
env-540	SI34jun09_135m_1040685	-	788	723	RNA → RplB (COG0090)rplB (PRK09374) →
env-541	SI34jun09_100m_1002546	-	626	561	RNA → RplB (COG0090)rplB (PRK09374) →
env-542	JGI20151J14362_10030512	+	2508	2573	RNA →
env-543	CESI01072935.1	+	1105	1170	RNA →
env-544	PML_READ_01030272	-	197	132	RNA → RplB (COG0090)rplB (PRK09374) →
env-545	F10SI0310a_Sequence0000021673	-	388	323	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-546	2236876003_146267	+	345	409	RNA → RplB (COG0090)rplB (PRK09374) →
env-547	2236876010_0560637	+	290	354	RNA → ← hypo
env-548	2236876010_0169121	-	311	246	RNA → RplB (COG0090)rplB (PRK09374) →
env-549	2236876009_267955	-	333	268	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-550	2236876009_052156	-	273	208	RNA → RplB (COG0090)rplB (PRK09374) →
env-551	2236876010_0456997	-	181	116	RNA → RplB (COG0090)rplB (PRK09374) →
env-552	DelMOSum2011_c10406745	-	105	40	RNA → ← hypo
env-553	SI54feb11_100m_c1113376	-	189	124	RNA → RplB (COG0090)rplB (PRK09374) →
env-554	SI48aug10_10m_c1000222	+	2332	2397	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-555	SI34jun09_120m_1016761	-	1571	1506	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-556	SI48aug10_100m_1019662	-	473	408	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →

env-557	JGI20156J14371_10036454	-	128	63	RNA→
env-558	JGI20154J14316_10048488	+	1717	1782	RNA→
env-559	JGI20160J14292_10049921	-	944	879	RNA→ RplB (COG0090)rplB (PRK09374)→
env-560	JGI20153J14295_10106585	+	637	702	RNA→
env-561	JGI20153J14318_10106585	+	637	702	RNA→
env-562	JGI20157J14317_10081233	+	1167	1232	RNA→
env-563	JGI20158J14315_10394374	+	254	319	RNA→ rplW (PRK05738)Ribosomal_L23 (pfam00276)→
env-564	CERI01006995.1	-	80	15	RNA→
env-565	CESO01025210.1	-	5544	5479	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-566	F10SI03100a_Sequence0000087588	-	597	532	RNA→ RplB (COG0090)rplB (PRK09374)→
Rba-5-1	NZ_DS022282.1	-	1056719	1056654	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-567	JCVI_SCAF_1101667005364	+	568	633	RNA→ rplB (PRK09374)Ribosomal_L2 (pfam00181)→
env-568	DelMOSum2010_c10035518	+	2424	2489	RNA→ RplB (COG0090)rplB (PRK09374)→
env-569	DelMOSum2011_c10035518	+	2007	2072	RNA→
env-570	JGI20152J14361_10025542	+	1917	1982	RNA→
env-571	JGI20153J14295_10035283	-	131	66	RNA→
env-572	JGI20153J14318_10035283	-	131	66	RNA→
env-573	JGI20157J14317_10045573	+	1946	2011	RNA→
env-574	CESI01143925.1	+	1396	1461	RNA→
env-575	CESU01042376.1	-	78	13	RNA→
env-576	DelMOWin2010_c10019689	-	113	48	RNA→ ←hypo
env-577	JGI20152J14361_10025431	-	148	83	RNA→
env-578	JGI20160J14292_10037631	-	132	67	RNA→
env-579	JGI20151J14362_10009967	-	5544	5479	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-580	JGI20157J14317_10012557	+	1945	2010	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-581	CERM01019450.1	+	628	693	RNA→
env-582	2236876001_009312	-	254	189	RNA→ RplB (COG0090)rplB (PRK09374)→
env-583	JGI20156J14371_10029870	+	2238	2303	RNA→ rplB (PRK09374)Ribosomal_L2 (pfam00181)→
env-584	JGI20154J14316_10019470	-	1818	1753	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ rpsC (PRK00310)30S_S3_KH (cd02412)→
env-585	JGI20153J14295_10035952	+	1907	1972	RNA→
env-586	JGI20153J14318_10035952	+	1907	1972	RNA→
env-587	JGI20159J14440_10007957	+	3434	3499	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ rplP (PRK09203)Ribosomal_L16 (pfam00252)→
env-588	JGI20155J14468_10004488	+	2462	2527	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-589	JGI20158J14315_10007229	+	2960	3025	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
Sgu-1-1	NZ_JASG01000004.1	-	2771313	2771244	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ RplP (COG0197)rplP (PRK09203)→
env-590	CENJ01071080.1	+	446	521	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→
env-591	CENR01032483.1	+	411	486	RNA→
env-592	JGI12120J13076_100262	+	774	849	RNA→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ rpsC (PRK00310)30S_S3_KH (cd02412)→

env-593	JGI11929J13085_109680	+	171	246	RNA → RplB (COG0090)rplB (PRK09374) →
env-594	JGI12207J13218_1020216	+	89	164	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-595	CEOE01076289.1	-	558	483	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-596	LAZR01000132.1	-	92425	92350	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-597	CEWQ01009550.1	+	346	421	RNA → RplB (COG0090)rplB (PRK09374) →
Ssp-3-1	NZ_JPOY01000011.1	-	2334383	2334308	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Ssp-4-1	NZ_CH959310.1	-	345269	345194	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-598	CEQX01294317.1	-	107	32	RNA →
env-599	CESO01088717.1	+	87	162	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
Ssp-5-1	NZ_CH959312.1	-	929126	929051	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Spo-1-1	NZ_AXZR01000005.1	+	3608	3683	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-600	CEQZ01007430.1	-	103	28	RNA →
env-601	CERD01103759.1	+	510	585	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-602	CERE01033137.1	+	1304	1379	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-603	CERJ01019869.1	-	717	642	RNA → RplB (COG0090)rplB (PRK09374) →
env-604	CESK01030715.1	-	2698	2623	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-605	CEOG01072571.1	-	582	507	RNA → RplB (COG0090)rplB (PRK09374) →
env-606	JGI11755J13075_100039	+	3752	3827	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-607	JGI11949J13268_1000009	+	3765	3840	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-608	CEQG01048819.1	-	2905	2830	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-609	CEVJ01067098.1	+	321	396	RNA → RplB (COG0090)rplB (PRK09374) →
env-610	CAM_READ_0079652197	+	1	76	RNA →
env-611	SL_1KL_011_SED_10748645	+	106	170	RNA → RplB (COG0090)rplB (PRK09374) →
env-612	SL_9KL_010_SED_10060232	-	1582	1518	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-613	JGI24025J20009_10228543	-	185	112	RNA → RplB (COG0090)rplB (PRK09374) →
env-614	JGI24724J26744_10018762	+	3389	3462	RNA →
Oin-1-1	NZ_ABID01000001.1	+	1417271	1417344	RNA → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) → RplP (COG0197)rplP (PRK09203) →
env-615	LAZR01017474.1	+	457	530	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-616	JGI24724J26744_10081951	+	450	522	RNA → RplB (COG0090)rplB (PRK09374) →

env-617	ABEF01021384.1	-	622	549	RNA → RplB (COG0090)rplB (PRK09374) →
env-618	CEQG01019720.1	+	5395	5468	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-619	CEQZ01013875.1	-	101	28	RNA →
env-620	CESC01001606.1	-	1753	1680	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-621	CEVI01215114.1	-	178	105	RNA → RplB (COG0090)rplB (PRK09374) →
env-622	CEWF01005413.1	+	2525	2598	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-623	CERO01018958.1	-	2363	2290	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-624	CEVA01074518.1	+	66	139	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-625	JGI24724J26744.10034861	+	2147	2220	RNA →
env-626	JGI24723J26617.10013494	+	1334	1407	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-627	LAZR01008751.1	+	1162	1237	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-628	JGI24724J26744.10022772	+	2527	2568	RNA → RplB (COG0090)rplB (PRK09374) →
env-629	JGI24724J26744.10281221	+	457	498	RNA → ←hypo
Sdo-1-1	NZ_JASF01000005.1	+	1880338	1880379	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
Sdo-1-2	NZ_JAMC01000005.1	+	6216	6257	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-630	KVRMV2_105402183	-	158	94	RNA → RplB (COG0090)rplB (PRK09374) →
env-631	KVRMV2_100053128	+	1810	1873	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-632	KVRMV2_100511851	+	614	679	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-633	3300001592.10006696	-	11253	11192	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-634	JGI24770J26754.10633113	-	235	176	RNA → RplB (COG0090)rplB (PRK09374) →
env-635	JGI24770J26754.10084963	-	885	824	RNA → RplB (COG0090)rplB (PRK09374) →
env-636	APMI01044789.1	+	283	344	RNA → RplB (COG0090)rplB (PRK09374) →
env-637	JGI24770J26754.10316505	+	277	338	RNA → RplB (COG0090)rplB (PRK09374) →
Lme-1-1	NC_023135.1	+	198601	198709	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → hypo → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-638	CAM_READ_0234721741	-	220	152	RNA → RplB (COG0090)rplB (PRK09374) →
env-639	84546017	-	387	322	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
Rba-1-1	NZ_AVDB01000002.1	+	2929	2994	RNA → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RplP (COG0197)rplP (PRK09203) →
env-640	84518656	-	774	709	RNA → RplB (COG0090)rplB (PRK09374) →
env-641	CAM_READ_0234724723	+	190	256	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-642	CAM_READ_0235767883	+	190	256	RNA → RplB (COG0090)rplB (PRK09374) →
env-643	JCVL_SCAF_1101667302592	-	664	599	RNA → RplB (COG0090)rplB (PRK09374) →
env-644	CAM_READ_0236589595	-	346	280	RNA → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-645	84547844	+	884	948	RNA →
env-646	CAM_READ_0236055591	-	90	24	RNA → hypo →
env-647	CAM_READ_0236222577	-	217	152	RNA → RplB (COG0090)rplB (PRK09374) →

env-648	CAM_READ_0235239301	+	303	368	RNA →
env-649	JCVI_READ_1101854610991	+	341	406	RNA → rplB (PRK09374) Ribosomal_L2 (pfam00181) →
env-650	CAM_READ_0235244455	+	234	302	RNA →
Wma-1-1	NZ_KB902287.1	-	74480	74410	RNA → RplB (COG0090) rplB (PRK09374) → rpsS (PRK00357) RpsS (COG0185) → rplV (PRK00565) Ribosomal_L22 (pfam00237) → RpsC (COG0092) rpsC (PRK00310) → RplP (COG0197) rplP (PRK09203) →
env-651	JCVI_READ_1108839274073	+	792	857	RNA →
env-652	JGI11829J13087_100089	+	1021	1083	RNA → RplB (COG0090) rplB (PRK09374) → rpsS (PRK00357) RpsS (COG0185) → rplV (PRK00565) Ribosomal_L22 (pfam00237) → RpsC (COG0092) rpsC (PRK00310) → RplP (COG0197) rplP (PRK09203) → hypo →
Mal-2-1	NZ_CP010855.1	-	3005866	3005804	RNA → RplB (COG0090) rplB (PRK09374) → rpsS (PRK00357) RpsS (COG0185) → rplV (PRK00565) Ribosomal_L22 (pfam00237) → RpsC (COG0092) rpsC (PRK00310) → RplP (COG0197) rplP (PRK09203) →
env-653	JGI12120J13076_116087	+	62	124	RNA → RplB (COG0090) rplB (PRK09374) →
env-654	JGI11929J13085_103365	-	387	325	RNA → rplB (PRK09374) Ribosomal_L2 (pfam00181) →
env-655	JGI11819J13099_125412	+	134	196	RNA →
env-656	JGI12210J13797_10226873	-	121	59	RNA → hypo →
Pga-3-1	NC_023137.1	+	301203	301281	RNA → RplB (COG0090) rplB (PRK09374) → rpsS (PRK00357) RpsS (COG0185) → rplV (PRK00565) Ribosomal_L22 (pfam00237) → RpsC (COG0092) rpsC (PRK00310) → RplP (COG0197) rplP (PRK09203) →

1.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 1.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one L2-

Alphaproteobacteria RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 1.2.

cd00719 (1) GIY-YIG nuclease domain superfamily.

cd01658 (4) Ribosomal protein L30, which is found in eukaryotes and prokaryotes but not in archaea, is one of the smallest ribosomal proteins with a molecular mass of about 7kDa.

cd02412 (29) K homology RNA-binding (KH) domain of the prokaryotic 30S small ribosomal subunit protein S3.

cd03886 (1) M20 Peptidase Aminoacylase 1 family.

COG0090 (567) Ribosomal protein L2 [Translation, ribosomal structure and biogenesis]

COG0091 (13) Ribosomal protein L22 [Translation, ribosomal structure and biogenesis]

COG0092 (310) Ribosomal protein S3 [Translation, ribosomal structure and biogenesis]

COG0094 (5) Ribosomal protein L5 [Translation, ribosomal structure and biogenesis]

COG0097 (5) Ribosomal protein L6P/L9E [Translation, ribosomal structure and biogenesis]

COG0098 (4) Ribosomal protein S5 [Translation, ribosomal structure and biogenesis]

COG0185 (365) Ribosomal protein S19 [Translation, ribosomal structure and biogenesis]

COG0186 (1) Ribosomal protein S17 [Translation, ribosomal structure and biogenesis]

COG0197 (289) Ribosomal protein L16/L10AE [Translation, ribosomal structure and biogenesis]

COG0198 (5) Ribosomal protein L24 [Translation, ribosomal structure and biogenesis]

COG0256 (1) Ribosomal protein L18 [Translation, ribosomal structure and biogenesis]

COG0596 (3) Pimeloyl-ACP methyl ester carboxylesterase [Coenzyme transport and metabolism, General function prediction only]

COG1917 (1) Cupin domain protein related to quercetin dioxygenase [General function prediction only]

pfam00181 (107) Ribosomal Proteins L2, RNA binding domain.

pfam00189 (3) Ribosomal protein S3, C-terminal domain.

pfam00203 (7) Ribosomal protein S19.

pfam00237 (339) Ribosomal protein L22p/L17e.

pfam00238 (5) Ribosomal protein L14p/L23e.

pfam00252 (8) Ribosomal protein L16p/L10e.

pfam00253 (5) Ribosomal protein S14p/S29e.

pfam00276 (1) Ribosomal protein L23.

pfam00366 (4) Ribosomal protein S17.

pfam00410 (5) Ribosomal protein S8.

pfam00831 (5) Ribosomal L29 protein.

pfam00861 (4) Ribosomal L18 of archaea, bacteria, mitoch.

pfam03947 (3) Ribosomal Proteins L2, C-terminal domain.

pfam06248 (1) Centromere/kinetochore Zw10.

pfam12697 (3) Alpha/beta hydrolase family.

pfam13759 (4) Putative 2OG-Fe(II) oxygenase.

pfam16867 (1) Dimethylsulfoniopropionate lyase.

PRK00004 (5) 50S ribosomal protein L24; Reviewed

PRK00010 (5) 50S ribosomal protein L5; Validated

PRK00136 (5) 30S ribosomal protein S8; Validated

PRK00306 (5) 50S ribosomal protein L29; Reviewed

PRK00310 (337) 30S ribosomal protein S3; Reviewed

PRK00357 (372) 30S ribosomal protein S19; Reviewed

PRK00550 (4) 30S ribosomal protein S5; Validated
PRK00565 (353) 50S ribosomal protein L22; Reviewed
PRK05483 (5) 50S ribosomal protein L14; Validated
PRK05498 (5) 50S ribosomal protein L6; Validated
PRK05593 (5) 50S ribosomal protein L18; Reviewed
PRK05610 (5) 30S ribosomal protein S17; Reviewed
PRK05611 (4) 50S ribosomal protein L30; Reviewed
PRK05738 (2) 50S ribosomal protein L23; Reviewed
PRK08881 (5) 30S ribosomal protein S14; Reviewed

PRK09203 (297) 50S ribosomal protein L16; Reviewed
PRK09374 (677) 50S ribosomal protein L2; Validated
smart00322 (5) K homology RNA-binding domain.
smart00465 (1) GIY-YIG type nucleases (URI domain).
TIGR01891 (1) amidohydrolase. [Protein fate, Degradation of proteins, peptides, and glycopeptides]
TIGR02466 (1) conserved hypothetical protein. [Hypothetical proteins, Conserved]

1.4 Multiple-sequence alignment

Each L2-Alphaproteobacteria RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 1.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The L2-Alphaproteobacteria RNA itself is denoted by the line underneath marked 5’ and 3’ on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded green. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-

Crick or G-U pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, red nucleotides: nucleotide identity conserved more than 97% of the time, black nucleotides: 90%, gray nucleotides: 75%, red circle (◉): nucleotide is present 97% of the time, black circle (◐): 90%, gray circle (◑): 75%, white circle (◒): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Cba-1-1, Gne-1-1, Kvu-2-1, Lca-1-1, Lsp-5-1, Lsp-9-1, Nig-1-1, Nit-1-1, Nit-1-2, Oin-1-1, Pfe-2-1, Rba-5-1, Rca-1-1, Rca-2-1, Rca-3-1, Rca-5-1, Rmo-2-1, Rnu-1-1, Rsp-20-1, Rsp-3-1, Rsp-6-1, Sdo-1-2, Spo-1-1, Ssp-1-1, Ssp-3-1, Tsp-2-1, env-100, env-102, env-107, env-11, env-110, env-111, env-112, env-113, env-114, env-115, env-12, env-123, env-126, env-129, env-130, env-131, env-132, env-133, env-134, env-137, env-140, env-142, env-147, env-152, env-153, env-154, env-159, env-160, env-161, env-180, env-181, env-182, env-183, env-184, env-185, env-198, env-199, env-208, env-209, env-210, env-211, env-212, env-238, env-239, env-240, env-241, env-242, env-243, env-244, env-245, env-246, env-249, env-250, env-251, env-253, env-267, env-268, env-270, env-28, env-281, env-283, env-29, env-292, env-294, env-30, env-302, env-303, env-304, env-305, env-306, env-307, env-31, env-318, env-32, env-328, env-33, env-333, env-334, env-34, env-348, env-349, env-350, env-351, env-352, env-353, env-354, env-355, env-366, env-368, env-376, env-377, env-383, env-384, env-385, env-387, env-390, env-393, env-401, env-406, env-408, env-409, env-410, env-411, env-412, env-415, env-420, env-424, env-425, env-44, env-442, env-443, env-444, env-446, env-449, env-45, env-450, env-451, env-452, env-453, env-454, env-455, env-456, env-457, env-46, env-461, env-462, env-466, env-468, env-470, env-471, env-474, env-478, env-479, env-48, env-480, env-481, env-485, env-486, env-487, env-488, env-489, env-490, env-491, env-492, env-496, env-498, env-499, env-501, env-504, env-509, env-510, env-511, env-529, env-53, env-532, env-535, env-537, env-538, env-539, env-54, env-540, env-541, env-542, env-543, env-544, env-545, env-547, env-550, env-551, env-552, env-553, env-554, env-555, env-556, env-557, env-558, env-559, env-560, env-561, env-562, env-563, env-564, env-565, env-566, env-568, env-569, env-570, env-571, env-572, env-573, env-574, env-575, env-577, env-578, env-58, env-580, env-581, env-584, env-585, env-586, env-587, env-588, env-589, env-593, env-594, env-599, env-601, env-602, env-603, env-604, env-607, env-608, env-609, env-61, env-610, env-619, env-62, env-620, env-621, env-622, env-63, env-642, env-654, env-655, env-73, env-80, env-81, env-82, env-87, env-95

Hma-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloarcula marismortui</i> ATCC 43049
Hsa-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloarcula salaria</i>
Hsi-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloarcula sinaiensis</i> ATCC 33800
Hva-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloarcula vallismortis</i> ATCC 29715
Hsa-3-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halobacterium salinarum</i> R1
Hsp-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halobacterium</i> sp. DL1
Hsp-3-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halobacterium</i> sp. NRC-1
Hla-1-1 to Hla-1-2	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halobiforma lacisalsi</i> AJ5
Hni-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halobiforma nitratireducens</i> JCM 10879
Hha-1-1 to Hha-1-2	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halococcus hamelinensis</i> 100A6
Hmo-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halococcus morrhuae</i> DSM 1307
Hsa-4-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halococcus saccharolyticus</i> DSM 5350
Hsa-5-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halococcus salifodinae</i> DSM 8989
Hth-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halococcus thailandensis</i> JCM 13552
Hal-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax alexandrinus</i> JCM 10717
Hde-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax denitrificans</i> ATCC 35960
Hel-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax elongans</i> ATCC BAA-1513
Hgi-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax gibbonsii</i> ATCC 33959
Hla-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax larsenii</i> JCM 13917
Hlu-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax lucentense</i> DSM 14919
Hme-1-1 to Hme-1-2	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax mediterranei</i> ATCC 33500
Hmu-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax mucosum</i> ATCC BAA-1512
Hpr-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax prahovense</i> DSM 18310
Hsp-4-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax</i> sp. ATCC BAA-644
Hsp-5-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax</i> sp. ATCC BAA-645
Hsp-6-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax</i> sp. ATCC BAA-646
Hsu-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax sulfurifontis</i> ATCC BAA-897
Hvo-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax volcanii</i> DS2
Hbo-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halogeometricum borinquense</i> DSM 11551
Hsa-6-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halogramum salarium</i> B-1
Hka-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halomicrobium katesii</i> DSM 19301
Hmu-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halomicrobium mukohataei</i> DSM 12286
Hxa-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halopiger xanaduensis</i> SH-6
Hwa-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloquadratum walsbyi</i> C23
Hwa-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloquadratum walsbyi</i> DSM 16790
Hti-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorhabdus tiamatea</i> SARL4B
Hut-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorhabdus utahensis</i> DSM 12940
Hai-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum aidingense</i> JCM 13560
Har-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum arcis</i> JCM 13916
Hca-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum californiense</i> DSM 19288
Hco-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum coriense</i> DSM 10284
Hdi-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum distributum</i> JCM 10118
Hdi-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum distributum</i> JCM 9100
Hho-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum hochstenum</i> ATCC 700873
Hko-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum kocurii</i> JCM 14978
Hla-3-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum lacusprofundi</i> ATCC 49239
Hli-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum lipolyticum</i> DSM 21995
Hli-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum litoreum</i> JCM 13561
Hsa-7-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum saccharovororum</i> DSM 1137
Hsp-7-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum</i> sp. T3
Hte-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum tebenquichense</i> DSM 14210
Hte-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum terrestre</i> JCM 10247
Hpa-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halosarcina pallida</i> JCM 14848
Hca-3-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halosimplex carlsbadense</i> 2-9-1
Hli-3-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloterrigena limicola</i> JCM 13563
Hsa-8-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloterrigena salina</i> JCM 13891
Hth-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloterrigena thermotolerans</i> DSM 11522
Htu-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloterrigena turkmenica</i> DSM 5511
Has-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halovinax asiaticus</i> JCM 14624
Nae-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba aegyptia</i> DSM 13077
Nas-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba asiatica</i> DSM 12278
Nch-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba chahannaensis</i> JCM 10990
Nhu-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba hukuunbeirensis</i> JCM 10989
Nma-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba magadii</i> ATCC 43099
Nta-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba taiwanensis</i> DSM 12281

Nal-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema altunense</i> JCM 12890
Nga-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema gari</i> JCM 14663
Npa-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema pallidum</i> DSM 3751
Npe-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema pellirubrum</i> DSM 15624
Nsp-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema sp.</i> J7-2
Nve-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema versiforme</i> JCM 10478
Ngr-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronobacterium gregoryi</i> SP2
Nam-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronococcus amylolyticus</i> DSM 10524
Nje-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronococcus jeotgali</i> DSM 18795
Noc-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronococcus occultus</i> SP4
Nin-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronolimnobius innermongolicus</i> JCM 12255
Nmo-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronomonas moolapensis</i> 8.8.11
Nph-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronomonas pharaonis</i> DSM 2160
Nba-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronorubrum bangense</i> JCM 10635
Nsu-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronorubrum sulfidifaciens</i> JCM 14089
Nti-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronorubrum tibetense</i> GA33
Ssp-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Salinarchaeum sp.</i> Harcht-Bsk1
Hag-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halococcaceae	<i>Halococcus agarilyticus</i>
Hse-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halococcaceae	<i>Halococcus sediminicola</i>
Hru-1-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Halobellus rufus</i>
Hal-2-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloferax alexandrinus</i>
Hgi-2-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloferax gibbonsii</i>
Hme-1-1 to Hme-1-2	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloferax mediterranei</i> ATCC 33500
Hsp-8-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloferax sp.</i> ATB1
Hna-1-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloplanus natans</i> DSM 17983
Hru-2-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halolamina rubra</i>
Hez-1-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halorubrum ezzemoulense</i> DSM 17463
Hha-2-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halorubrum halophilum</i>
Hsa-9-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halorubrum saccharovorum</i>
Hsp-9-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halorubrum sp.</i> AJ67
Hsp-10-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halorubrum sp.</i> BV1
Hdj-1-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halopiger djelfmassiliensis</i>
Hgo-1-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halopiger goeimassiliensis</i>
Hsa-10-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halopiger salifodinae</i>
Hla-4-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halostagnicola larsenii</i> XH-48
Hsp-11-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halostagnicola sp.</i> A56
Hje-2-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Haloterrigena jeotgali</i> A29
Nal-2-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Natrinema altunense</i>
Nsp-2-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Natrinema sp.</i> J7-1
Mco-1-1	Archaea	Euryarchaeota	Methanocellales	Methanocellales	Methanocellaceae	<i>Methanocella conradii</i> HZ254
CMe-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Generaincertae sedis	<i>Candidatus Methanoregula boonei</i> 6A8
Mpa-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Generaincertae sedis	<i>Methanosphaerula palustris</i> E1-9c
Mbo-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoculleus bourgensis</i> MS2
Mma-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoculleus marisnigri</i> JR1
Mse-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoculleus sediminis</i>
Msp-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoculleus sp.</i> MH98A
Mli-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanofollis liminatans</i> DSM 4140
Mpa-2-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanolacinia paynteri</i>
Mmo-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanomicrobium mobile</i> BP
Mli-2-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoplanus limicola</i> DSM 2279
Mpe-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoplanus petrolearius</i> DSM 11571
Mta-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanoregulaceae	<i>Methanolinea tarda</i> NOBI-1
Mfo-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanoregulaceae	<i>Methanoregula formicica</i> SMSP
Mhu-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanospirillaceae	<i>Methanospirillum hungatei</i> JF-1
Mco-2-1	Archaea	Euryarchaeota	Methanosarcinales	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina concilii</i> GP6
Mha-1-1	Archaea	Euryarchaeota	Methanosarcinales	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina harundinacea</i> 6Ac
Msh-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methermicocccaceae	<i>Methermicoccus shengliensis</i> DSM 18856
env-1 to env-513						environmental samples

2.2 Gene contexts

Each L4-Archaeoglobi RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one L4-Archaeoglobi RNA are assigned a color; other domains are gray. Information about these conserved

domains is given in Section 2.3. The accession of the sequence containing each L4-Archaeoglobi RNA is given in the column named “Seq. accession”. Accessions beginning with “NC-”, “NS-”, “NW-” or “NZ-” are contained in RefSeq. Other accessions refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each L4-Archaeoglobi RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 2.1.

abbrev.	Seq. accession		5′ at	3′ at	genes
Mli-1-1	NZ_CM001555.1	+	465849	465921	RNA → RplC (COG0087)rpl3p (PRK04231)→ RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→ RplD (COG0088)rpl4p (PRK04042)→ RplW (COG0089)PRK14548 (PRK14548)→ RplW (COG0089)PRK14548 (PRK14548)→ RplB (COG0090)rpl2p (PRK09612)→ RplB (COG0090)rpl2p (PRK09612)→ RpsS (COG0185)rps19p (PRK04038)→ RpsS (COG0185)rps19p (PRK04038)→ rpl22p (PRK04223)RplV (COG0091)→ rpl22p (PRK04223)RplV (COG0091)→ RpsC (COG0092)rps3p (PRK04191)→ RpsC (COG0092)rps3p (PRK04191)→ PRK14549 (PRK14549)Ribosomal_L29 (pfam00831)→ PRK14549 (PRK14549)Ribosomal_L29 (pfam00831)→ PRK03879 (PRK03879)UPF0086 (pfam01868)→ PRK03879 (PRK03879)UPF0086 (pfam01868)→ RpsQ (COG0186)rps17p (PRK08572)→ RpsQ (COG0186)rps17p (PRK08572)→ rpl14p (PRK08571)Ribosomal_L14 (pfam00238)→ rpl14p (PRK08571)Ribosomal_L14 (pfam00238)→ rpl24p (PRK01191)KOW_RPL26 (cd06089)→ rpl24p (PRK01191)KOW_RPL26 (cd06089)→ PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900)→ PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900)→ RplE (COG0094)rpl5p (PRK04219)→ RplE (COG0094)rpl5p (PRK04219)→ RpsN (COG0199)rps14p (PRK05766)→ RpsN (COG0199)rps14p (PRK05766)→ rps8p (PRK04034)RpsH (COG0096)→ rps8p (PRK04034)RpsH (COG0096)→ RplF (COG0097)rpl6p (PRK05518)→ RplF (COG0097)rpl6p (PRK05518)→ rpl32e (PRK08562)Ribosomal_L32e (pfam01655)→ rpl32e (PRK08562)Ribosomal_L32e (pfam01655)→ rpl19e (PRK08570)Ribosomal_L19e (pfam01280)→ rpl19e (PRK08570)Ribosomal_L19e (pfam01280)→ RplR (COG0256)rpl18p (PRK08569)→ RplR (COG0256)rpl18p (PRK08569)→ RpsE (COG0098)rps5p (PRK04044)→ RpsE (COG0098)rps5p (PRK04044)→ RNA → RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→ uL23_arch (TIGR03636)Ribosomal_L23 (pfam00276)→ RplB (COG0090)rpl2p (PRK09612)→ RpsS (COG0185)rps19p (PRK04038)→ rpl22p (PRK04223)RplV (COG0091)→ RpsC (COG0092)rps3p (PRK04191)Spore_IV_A (pfam09547)→ PRK14549 (PRK14549)Ribosomal_L29 (pfam00831)→ PRK03879 (PRK03879)UPF0086 (pfam01868)→ RpsQ (COG0186)rps17p (PRK08572)→ rpl14p (PRK08571)Ribosomal_L14 (pfam00238)→ rpl24p (PRK01191)KOW_RPL26 (cd06089)→ PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900)→ RplE (COG0094)rpl5p (PRK04219)→ RpsN (COG0199)rps14p (PRK05766)→ rps8p (PRK04034)RpsH (COG0096)→ RplF (COG0097)rpl6p (PRK05518)→ rpl32e (PRK08562)Ribosomal_L32e (pfam01655)→ rpl19e (PRK08570)Ribosomal_L19e (pfam01280)→ RplR (COG0256)rpl18p (PRK08569)→ RpsE (COG0098)rps5p (PRK04044)→ RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→ RNA → MTH1 (COG2106)→ RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→ RNA → hypo→ RNA → hypo→ rpl3p (PRK04231)Ribosomal_L3 (pfam00297)→ RNA → ←hypo
env-1	SakLake120mDRAFT_c0000096	+	22741	22827	RNA → RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→ uL23_arch (TIGR03636)Ribosomal_L23 (pfam00276)→ RplB (COG0090)rpl2p (PRK09612)→ RpsS (COG0185)rps19p (PRK04038)→ rpl22p (PRK04223)RplV (COG0091)→ RpsC (COG0092)rps3p (PRK04191)Spore_IV_A (pfam09547)→ PRK14549 (PRK14549)Ribosomal_L29 (pfam00831)→ PRK03879 (PRK03879)UPF0086 (pfam01868)→ RpsQ (COG0186)rps17p (PRK08572)→ rpl14p (PRK08571)Ribosomal_L14 (pfam00238)→ rpl24p (PRK01191)KOW_RPL26 (cd06089)→ PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900)→ RplE (COG0094)rpl5p (PRK04219)→ RpsN (COG0199)rps14p (PRK05766)→ rps8p (PRK04034)RpsH (COG0096)→ RplF (COG0097)rpl6p (PRK05518)→ rpl32e (PRK08562)Ribosomal_L32e (pfam01655)→ rpl19e (PRK08570)Ribosomal_L19e (pfam01280)→ RplR (COG0256)rpl18p (PRK08569)→ RpsE (COG0098)rps5p (PRK04044)→ RNA → Methyltrn_RNA_3 (pfam02598)→ RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→ RNA → MTH1 (COG2106)→ RplC (COG0087)rpl3p (PRK04231)→ RNA → hypo→ RNA → hypo→ rpl3p (PRK04231)Ribosomal_L3 (pfam00297)→ RNA → ←hypo
env-2	SL_8KL_010_SED_10004849	-	1682	1589	RNA → Methyltrn_RNA_3 (pfam02598)→ RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→ RNA → MTH1 (COG2106)→ RplC (COG0087)rpl3p (PRK04231)→ RNA → hypo→ RNA → hypo→ rpl3p (PRK04231)Ribosomal_L3 (pfam00297)→ RNA → ←hypo
env-3	SL_8KL_010_SED_10000147	+	55887	55980	RNA → MTH1 (COG2106)→ RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→ RNA → MTH1 (COG2106)→ RplC (COG0087)rpl3p (PRK04231)→ RNA → hypo→ RNA → hypo→ rpl3p (PRK04231)Ribosomal_L3 (pfam00297)→ RNA → ←hypo
env-4	JGI24732J26686.1113329	+	312	377	RNA →
env-5	JGI24731J21663.1001690	+	821	886	RNA → hypo→
env-6	JGI24729J20445.1012742	-	868	807	RNA → hypo→ rpl3p (PRK04231)Ribosomal_L3 (pfam00297)→ RNA → ←hypo
env-7	JGI24730J26740.1315709	+	120	181	RNA → ←hypo

env-8	2014733311	-	1671	1608	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-9	ANASMECb_4085297_C1539	-	1671	1608	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-10	PCEOT_contig04337	+	574	637	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → hypo →
env-11	JGI12104J13512_1001493	+	1210	1273	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32_L32e (cd00513) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) → AdkA (COG2019)PRK04040 (PRK04040) → COG1422 (COG1422) → DUF106 (pfam01956) → CmkB (COG1102)PRK04182 (PRK04182) →
env-12	JGI11944J13513_1000575	-	22491	22428	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → uL6_arch (TIGR03653)Ribosomal_L6 (pfam00347) → rpl6p (PRK05518)Ribosomal_L6 (pfam00347) → rpl32e (PRK08562)Ribosomal_L32_L32e (cd00513) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →
Mhu-1-1	NC_007796.1	-	2515622	2515559	RNA → hypo → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) →
env-13	3300001567_10007289	+	4411	4498	RNA → hypo →
env-14	BDMC2_contig11431	+	2927	3013	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-15	APHM01006905.1	-	6665	6566	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-16	LTJ07As871_J07ABscf098861	+	1109424	1109523	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
Hwa-1-1	NC_017459.1	-	2240787	2240688	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-17	77514049	-	684	585	RNA → Methyltrn_RNA_3 (pfam02598) →
env-18	FLAS_READ_83861724	-	684	585	RNA → ←hypo

env-19	P_A23_Liq_1_Fmt_1000094	+	5234	5333	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-20	P_A23_Liq_3_Fmt_1000024	+	11155	11254	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-21	P_A23_Liq_2_Fmt_1000003	-	57459	57360	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-22	GSLNARP_contig28763	+	955	1054	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
Hwa-2-1	NC_008212.1	-	2141989	2141890	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-23	GSLNARP_contig23680	+	166	268	RNA → PRK07233 (PRK07233)Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-24	GSLNAS_F7I09SK02F1FOF	+	46	143	RNA → MTH1 (COG2106) →
env-25	APHM01021632.1	-	3874	3775	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) →
env-26	LTJ07As871_J07ABscf098869	-	558211	558112	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → rpl22p (PRK04223)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rps3p (PRK04191)Astro_capsid_p (pfam12226) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) →
env-27	PR_CR_10_Liq_1_inCR_1027519	-	654	552	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-28	SL_4KL_010_BRINE_10026912	-	325	226	RNA → Methyltrn_RNA_3 (pfam02598) →
env-29	SL_5KL_010_BRINE_10001539	-	6337	6238	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571) →
env-30	SL_5KL_010_BRINE_10041088	-	903	804	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-31	P_1C_Sed_2_UnCty_1050957	-	389	290	RNA → Methyltrn_RNA_3 (pfam02598) → Methyltrn_RNA_3 (pfam02598) →
Hut-1-1	NC_013158.1	+	2340327	2340426	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → NT_POLXc (cd00141)PRK12766 (PRK12766)Rpl32e (COG1717)COG2251 (COG2251)HHH_5 (pfam14520) →
env-32	GSLSAAL_contig12629	-	3841	3739	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → rpl4p (PRK04042)Ribosomal_L4 (pfam00573) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) →
env-33	GSLSAAL_contig12562	-	1374	1272	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) →

env-34	GSLSAAL_contig12554	-	3225	3123	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-35	GSLSAAL_contig12558	-	4430	4328	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → KH (smart00322)archeal_30S_S3_KH (cd02411) →
env-36	SL_6KL_011_BRINE_1000585	-	15210	15108	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)uL23_arch (TIGR03636) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) →
env-37	SL_5KL_010_BRINE_10000390	+	6046	6145	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → ComEA (COG1555)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) →
env-38	SL_4KL_010_BRINE_10108326	+	36	135	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-39	SL_8KL_010_SED_10227597	-	345	246	RNA → Methyltrn_RNA_3 (pfam02598) →
env-40	SS_3KL_010_SOIL_10336605	-	246	147	RNA → Methyltrn_RNA_3 (pfam02598) →
env-41	APHM01002125.1	+	421	520	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → rpl2p (PRK09612)Ribosomal_L2 (pfam00181) →
env-42	LTJ07As871_J07ABscf098859	-	2359772	2359673	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → rpl2p (PRK09612)Ribosomal_L2 (pfam00181) → PRK12317 (PRK12317)Translation_factor_III (cd01513)GTPBP_II (cd03694) →
env-43	JXWU01069486.1	+	361	460	RNA → Methyltrn_RNA_3 (pfam02598) →
env-44	SS_3KL_010_SOIL_10060740	-	118	19	RNA → Methyltrn_RNA_3 (pfam02598) →
env-45	SL_5KL_010_BRINE_10001245	+	528	630	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archeal_euk (cd01657)rpl30p (PRK06049) →

env-46	SL_6KL_011_BRINE.1001562	+	7391	7493	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) →
env-47	SL_4KL_010_BRINE.10002586	+	550	652	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → RplE (COG0094) rpl5p (PRK04219) → RpsN (COG0199) rps14p (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → RecA (COG0468) Rpl32e (COG1717) HHH_5 (pfam14520) →
env-48	SL_7KL_010_BRINE.10000614	+	5277	5379	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → RplE (COG0094) rpl5p (PRK04219) → RpsN (COG0199) rps14p (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → RecA (COG0468) Rpl32e (COG1717) rpl32e (PRK08562) HHH_5 (pfam14520) → rpl19e (PRK08570) Ribosomal_L19e (pfam01280) → RplR (COG0256) rpl18p (PRK08569) → RpsE (COG0098) rps5p (PRK04044) →
env-49	GSLNARP_contig28693	+	496	598	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) →
env-50	SL_5KL_010_BRINE.10001521	+	7795	7897	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → rps19p (PRK04038) →
env-51	SL_6KL_011_BRINE.1000203	-	3778	3676	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) →
env-52	SL_5KL_010_SED.10001876	-	10224	10122	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) S4 (cd00165) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → RplE (COG0094) rpl5p (PRK04219) → RpsN (COG0199) rps14p (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → UvrC (COG0322) rpl32e (PRK08562) Ribosomal_L32e (pfam01655) HHH_5 (pfam14520) → rpl19e (PRK08570) Ribosomal_L19e (pfam01280) →
env-53	SL_4KL_010_BRINE.10000708	+	14067	14169	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → rps19p (PRK04038) →
env-54	P_1C_Liq_1_UnCty_1162688	-	122	20	RNA → MTH1 (COG2106) →

env-55	SL_6KL_011_BRINE_1072209	-	402	300	RNA → Methyltrn_RNA_3 (pfam02598) →
env-56	SL_5KL_010_BRINE_10188769	-	355	253	RNA → Methyltrn_RNA_3 (pfam02598) →
env-57	SL_4KL_010_BRINE_10162798	+	316	418	RNA → Methyltrn_RNA_3 (pfam02598) →
env-58	SL_6KL_011_BRINE_1009000	+	854	956	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038) →
env-59	ADL20m3uS_contig12843	-	170	68	RNA → Methyltrn_RNA_3 (pfam02598) →
env-60	2140918027-12578	+	373	475	RNA →
env-61	2140918027-03821	+	1792	1894	RNA → Methyltrn_RNA_3 (pfam02598) →
env-62	ADL20m3uS_contig10848	-	468	366	RNA → Methyltrn_RNA_3 (pfam02598) →
env-63	ADL5mRS1u_contig00538	+	967	1069	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) →
env-64	GQKUMWE02JS9JS	-	377	275	RNA → Methyltrn_RNA_3 (pfam02598) →
env-65	ADL20m3uS_contig10578	-	446	344	RNA → Methyltrn_RNA_3 (pfam02598) →
env-66	2140918017-36	-	14923	14821	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → UvrC (COG0322)Rpl32e (COG1717)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-67	GRCP39E01CI3EF	-	306	204	RNA → Methyltrn_RNA_3 (pfam02598) →
env-68	GRCP39E01CZCI9	+	86	188	RNA → Methyltrn_RNA_3 (pfam02598) →
env-69	2140918027-00954	+	88	190	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) →
env-70	GQKUMWE02F1GR6	+	61	163	RNA → Methyltrn_RNA_3 (pfam02598) →
env-71	GQKUMWE02JMQQS	+	64	166	RNA → Methyltrn_RNA_3 (pfam02598) →
env-72	SL_8KL_010_SED_10008943	+	2731	2830	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → KH (smart00322)archeal_30S_S3_KH (cd02411) →
env-73	SL_4KL_010_BRINE_10005953	+	2732	2831	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → KH (smart00322)archeal_30S_S3_KH (cd02411) →
env-74	SL_5KL_010_BRINE_10000601	+	12793	12892	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → rpl4p (PRK04042)Ribosomal_L4 (pfam00573) → rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → KH (smart00322)archeal_30S_S3_KH (cd02411) →
env-75	SL_5KL_010_SED_10018610	-	1058	959	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-76	JXWU01116399.1	-	162	60	RNA → Methyltrn_RNA_3 (pfam02598) →
env-77	GSLNARP_GFPJP1N02IUPJO	-	257	155	RNA → Methyltrn_RNA_3 (pfam02598) →
env-78	GSLNARP_GFPJP1N02J3NU6	-	222	120	RNA → Methyltrn_RNA_3 (pfam02598) →

Hsp-8-1	NZ_JPES01000061.1	+	4380	4479	<p>RNA → Methyltrn_RNA_3 (pfam02598) → hypo → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → hypo → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → hypo → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → hypo → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hde-1-1	NZ_AOLP01000011.1	+	331865	331964	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hlu-1-1	NZ_AOLH01000006.1	+	206888	206987	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hal-2-1	NZ_LK053000.1	-	908912	908813	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>

Hsp-6-1	NZ_AOLD01000045.1	-	26639	26540	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hsp-4-1	NZ_AOLF01000024.1	-	14963	14864	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hsp-5-1	NZ_AOLE01000011.1	-	83691	83592	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hme-1-1	NZ_AOLO01000012.1	-	67999	67900	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hme-1-2	NC_017941.2	+	2068879	2068978	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>

Hla-2-1	NZ_AOLI01000019.1	-	425010	424911	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
Hel-1-1	NZ_AOLK01000022.1	+	66470	66569	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
Hmu-1-1	NZ_AOLN01000013.1	-	37008	36909	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-79	SL_4KL_010_BRINE_10099275	-	413	314	RNA → Methyltrn_RNA_3 (pfam02598) →
env-80	SL_4KL_010_BRINE_10236927	-	339	240	RNA → Methyltrn_RNA_3 (pfam02598) →
env-81	SL_4KL_010_BRINE_10017268	+	119	218	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-82	SL_4KL_010_BRINE_10000094	-	9413	9314	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → COG2251 (COG2251)HHH_5 (pfam14520) →
env-83	SL_4KL_010_BRINE_10065590	+	860	959	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →

Hla-4-1	NZ_CP007055.1	+	1979362	1979461	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RecA (COG0468)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) →
Ssp-1-1	NC_021313.1	+	2429676	2429775	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → hypo → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → UvrC (COG0322)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) →
env-84	APHM01017236.1	-	204	105	RNA → MTH1 (COG2106) →
env-85	LTJ07As871.J07ABscf096273	-	204	105	RNA → MTH1 (COG2106) →
env-86	SL_4KL_010_BRINE_10002302	+	5048	5147	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) →
Hsp-11-1	NZ_JMIP02000014.1	-	158997	158898	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → hypo → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → hypo → hypo → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → hypo → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)UvrC (COG0322)Rpl32e (COG1717) →
env-87	GSLNARP_GFPJP1N02HFKWJ	-	439	343	RNA → PRK12442 (PRK12442) Methyltrn_RNA_3 (pfam02598) →
env-88	SL_4KL_010_BRINE_10091194	+	755	857	RNA → Methyltrn_RNA_3 (pfam02598) →
env-89	SL_4KL_010_BRINE_10095573	-	111	9	RNA → MTH1 (COG2106) →
Hka-1-1	NZ_KB905379.1	+	273922	274024	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) →
Hmu-2-1	NC_013202.1	+	1747213	1747315	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) →

Hca-3-1	NZ_AOIU01000034.1	-	38153	38054	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplD (COG0088) rpl4p (PRK04042) → PRK14548 (PRK14548) Ribosomal_L23 (pfam00276) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → RplX (COG0198) rpl24p (PRK01191) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) S4 (pfam01479) Ribosomal_S4e (pfam00900) → RplE (COG0094) rpl5p (PRK04219) → RpsN (COG0199) rps14P (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → Rpl32e (COG1717) rpl32e (PRK08562) HHH_5 (pfam14520) → rpl19e (PRK08570) Ribosomal_L19e (pfam01280) →
Hsa-5-1	NZ_AOME01000079.1	-	8539	8440	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) HHH_5 (pfam14520) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → RplX (COG0198) rpl24p (PRK01191) → PRK04313 (PRK04313) S4 (cd00165) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → RplE (COG0094) rpl5p (PRK04219) → hyp → hyp → RpsN (COG0199) rps14P (PRK05766) →
env-90	GQKUMWE01CQSAM	+	397	496	RNA → MTH1 (COG2106) →
Hag-1-1	NZ_BAFM01000007.1	+	1659	1758	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) UvrC (COG0322) rps3p (PRK04191) HHH_5 (pfam14520) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → RplX (COG0198) rpl24p (PRK01191) → PRK04313 (PRK04313) S4 (cd00165) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → RplE (COG0094) rpl5p (PRK04219) → RpsN (COG0199) rps14P (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → RecA (COG0468) Rpl32e (COG1717) rpl32e (PRK08562) HHH_5 (pfam14520) → rpl19e (PRK08570) Ribosomal_L19e (pfam01280) → RplR (COG0256) rpl18p (PRK08569) → RpsE (COG0098) rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657) rpl30p (PRK06049) → rpl15p (PRK06419) Ribosomal_L27A (pfam00828) → SecY (COG0201) PRK08568 (PRK08568) →
Hsa-4-1	NZ_AOMD01000025.1	+	140368	140467	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) HHH_5 (pfam14520) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) S4 (cd00165) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → RplE (COG0094) rpl5p (PRK04219) → RpsN (COG0199) rps14P (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → RecA (COG0468) Rpl32e (COG1717) COG2251 (COG2251) rpl32e (PRK08562) HHH_5 (pfam14520) →
env-91	GSLNARP_contig29074	-	461	359	RNA → Methyltrn_RNA_3 (pfam02598) →
env-92	P_1C_Liq_1_UnCty_1017446	+	565	667	RNA → MTH1 (COG2106) →
env-93	P_1C_Liq_3_UnCty_1022117	-	224	122	RNA → Methyltrn_RNA_3 (pfam02598) →
env-94	P_1C_Sed_2_UnCty_1128195	-	252	150	RNA → Methyltrn_RNA_3 (pfam02598) →
env-95	P_1C_Liq_2_UnCty_1026371	-	311	209	RNA → Methyltrn_RNA_3 (pfam02598) →
env-96	77515515	+	477	579	RNA → MTH1 (COG2106) →
env-97	FLAS_READ_83860922	+	477	579	RNA → MTH1 (COG2106) →
env-98	P_A23_Liq_3_Fmt_1016381	-	364	262	RNA → MTH1 (COG2106) →

env-99	APHM01021628.1	+	4390	4492	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) →
env-100	LTJ07As871_J07ABscf098869	+	456526	456628	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) →
env-101	P_1C_Sed_2_UnCty_1030622	+	624	726	RNA → MTH1 (COG2106) →
env-102	SL_5KL_010_BRINE_10180849	-	369	267	RNA → PRK10575 (PRK10575)Methyltrn_RNA_3 (pfam02598) →
env-103	SL_6KL_011_BRINE_1082566	-	592	490	RNA → PRK10575 (PRK10575)Methyltrn_RNA_3 (pfam02598) →
env-104	SL_8KL_010_SED_10233400	+	212	314	RNA → Methyltrn_RNA_3 (pfam02598) →
env-105	SL_4KL_010_BRINE_10134291	+	227	329	RNA → Methyltrn_RNA_3 (pfam02598) →
env-106	SL_5KL_010_BRINE_10114435	+	29	131	RNA → Methyltrn_RNA_3 (pfam02598) →
env-107	P_1C_Sed_2_UnCty_1330058	+	56	155	RNA → Methyltrn_RNA_3 (pfam02598) →
env-108	SL_4KL_010_BRINE_10687755	+	77	176	RNA → Methyltrn_RNA_3 (pfam02598) →
env-109	JXWU01090489.1	+	605	701	RNA → Methyltrn_RNA_3 (pfam02598) →
CHa-1-1	NZ_ASGZ01000021.1	+	7594	7693	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_leuk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) →
Hpa-2-1	NZ_AOIV01000008.1	-	240007	239908	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-110	SL_5KL_010_BRINE_10000579	-	6143	6044	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → hypo → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) →
env-111	SL_4KL_010_BRINE_10006116	-	6219	6120	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → hypo → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) →
env-112	SL_4KL_010_BRINE_10037372	+	1564	1663	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →

Nhu-1-1	NZ_AOIM01000008.1	+	9157	9256	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → RpmC (COG0255) PRK14549 (PRK14549) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) S4 (pfam01479) → hypo →
env-113	P_A23_Liq_1_Fmt_1001862	-	2728	2626	RNA → MTH1 (COG2106) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) →
env-114	P_A23_Liq_1_Fmt_1006312	-	589	487	RNA → Methyltrn_RNA_3 (pfam02598) →
env-115	P_A23_Liq_2_Fmt_1001778	-	147	45	RNA → MTH1 (COG2106) →
env-116	SL_5KL_010_BRINE_10182593	-	355	253	RNA → PRK10575 (PRK10575) Methyltrn_RNA_3 (pfam02598) →
env-117	SL_6KL_011_BRINE_1122878	+	59	161	RNA → Methyltrn_RNA_3 (pfam02598) →
env-118	SL_5KL_010_SED_10176812	-	343	241	RNA → Methyltrn_RNA_3 (pfam02598) →
env-119	GSLSAAL_GFP0ZZ301BFHUD	+	260	362	RNA → Methyltrn_RNA_3 (pfam02598) →
env-120	APHM01000442.1	+	2818	2917	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → rps19p (PRK04038) →
env-121	LTJ07As871_J07ABscf098878	-	600442	600343	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) →
env-122	JXWS01030537.1	+	838	937	RNA → Methyltrn_RNA_3 (pfam02598) →
env-123	P_A23_Liq_1_Fmt_1000580	+	837	936	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) →
env-124	P_A23_Liq_3_Fmt_1000785	-	1067	968	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) →
env-125	P_A23_Liq_2_Fmt_1000789	-	1096	997	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) →
env-126	GSLNARP_GFPJP1N02GVYAL	+	71	170	RNA → MTH1 (COG2106) →
env-127	P_1C_Liq_2_UnCty_1129324	+	141	240	RNA → MTH1 (COG2106) →
env-128	JXWS01088076.1	+	222	321	RNA → MTH1 (COG2106) →
env-129	SS_3KL_010_SOIL_10082725	-	438	339	RNA → Methyltrn_RNA_3 (pfam02598) →
Hna-1-1	NZ_KE386573.1	-	1301517	1301418	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → RplX (COG0198) rpl24p (PRK01191) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → RplE (COG0094) rpl5p (PRK04219) → RpsN (COG0199) rps14p (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → PRK12766 (PRK12766) RecA (COG0468) Rpl32e (COG1717) → rpl19e (PRK08570) Ribosomal_L19e (pfam01280) →
env-130	P_1C_Sed_2_UnCty_1009263	-	1341	1242	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) →
env-131	ADL20m3uS_contig11573	-	6008	5909	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) →

env-132	2140918017-125	-	28013	27914	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-133	2140918027-00843	+	673	772	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) →
har-1-1	NC_015954.1	-	1701293	1701194	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-134	SS_3KL_010_SOIL_10099808	-	212	113	RNA → Methyltrn_RNA_3 (pfam02598) →
env-135	2140918017-82247	+	63	164	RNA →
Nph-1-1	NC_007426.1	+	2369313	2369412	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → hypo → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → NT_POLXc (cd00141)PRK12766 (PRK12766)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-136	SL_4KL_010_BRINE_10016891	-	2655	2556	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →

env-137	SL_6KL_011_BRINE_1000523	+	4060	4159	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal-euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) →
env-138	P_1C_Liq_1_UnCty_1007975	+	1341	1443	RNA → Methyltrn_RNA_3 (pfam02598) →
env-139	SL_6KL_011_BRINE_1092333	+	64	166	RNA → Methyltrn_RNA_3 (pfam02598) →
env-140	SL_5KL_010_BRINE_10000145	-	14973	14871	RNA → MTH1 (COG2106) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-141	SL_6KL_011_BRINE_1010384	+	87	189	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) →
env-142	SL_5KL_010_SED_10000993	-	17753	17651	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-143	SL_8KL_010_SED_10049127	-	1844	1742	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) →
env-144	SL_4KL_010_BRINE_10002885	-	1066	964	RNA → MTH1 (COG2106) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-145	SL_6KL_011_BRINE_1040731	-	290	188	RNA → Methyltrn_RNA_3 (pfam02598) →
env-146	SL_6KL_011_BRINE_1090778	-	540	438	RNA → Methyltrn_RNA_3 (pfam02598) →
env-147	SL_6KL_011_BRINE_1020969	+	1942	2044	RNA → MTH1 (COG2106) →
env-148	SL_6KL_011_BRINE_1001075	-	545	443	RNA → Methyltrn_RNA_3 (pfam02598) →
Hsp-9-1	NZ_CBVY010000043.1	+	1088	1190	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) →

Hez-1-1	NZ_ATXS01000002.1	+	57125	57227	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-149	P_1C_Liq_1_UnCty_1110322	+	40	142	RNA → Methyltrn_RNA_3 (pfam02598) →
env-150	P_1C_Liq_2_UnCty_1085242	-	257	155	RNA → Methyltrn_RNA_3 (pfam02598) →
env-151	P_1C_Sed_2_UnCty_1018040	-	1354	1252	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) →
Hco-1-1	NZ_AOJL01000060.1	-	167010	166908	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → hypo → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-152	P_1C_Liq_3_UnCty_1007582	-	296	194	RNA → MTH1 (COG2106) →
env-153	P_A23_Liq_1_Fmt_1009395	-	369	267	RNA → MTH1 (COG2106) →
env-154	P_A23_Liq_2_Fmt_1002028	+	19	121	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) →
env-155	P_A23_Liq_2_Fmt_1023865	+	29	131	RNA → Methyltrn_RNA_3 (pfam02598) →
env-156	P_A23_Liq_3_Fmt_1023393	+	38	140	RNA → Methyltrn_RNA_3 (pfam02598) →
Hsp-10-1	NZ_JQKV01000002.1	-	421137	421035	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
Hli-1-1	NZ_AOJG01000040.1	-	82466	82364	RNA → MTH1 (COG2106) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →

Hsp-7-1	NZ_JH815330.1	+	360566	360668	<p>RNA → MTH1 (COG2106) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hha-2-1	NZ_BBJP01000034.1	+	23045	23147	<p>RNA → MTH1 (COG2106) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hdi-1-1	NZ_AOJN01000013.1	+	82475	82577	<p>RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hdi-2-1	NZ_AOJM01000049.1	-	26024	25922	<p>RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>

Hsa-9-1	NZ_JNFH02000042.1	+	4162	4264	RNA → hypō → hypō → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → hypō → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) →
Har-2-1	NZ_AOJJ01000075.1	+	39843	39945	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
Hte-2-1	NZ_AOIW01000054.1	-	29402	29300	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-157	P_1C_Liq_2_UnCty_1073497	-	265	163	RNA → Methyltrn_RNA_3 (pfam02598) →
env-158	SL_6KL_011_BRINE_1032700	-	1548	1446	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) →
env-159	SL_4KL_010_BRINE_10001141	+	89	191	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) → hypō →
env-160	SL_6KL_011_BRINE_1001616	-	387	285	RNA → MTH1 (COG2106) →

h3A-1-1	NZ_KK033115.1	+	666108	666210	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hai-1-1	NZ_AOJI01000026.1	-	211502	211400	<p>RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
env-161	ADL20m3uS_contig08402	-	1754	1652	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →</p>
env-162	2140918017-4520	-	13975	13873	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) →</p>
env-163	2140918027-00057	-	14028	13926	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hla-3-1	NC_012029.1	-	2428716	2428614	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>

Hho-1-1	NZ_AOJO01000045.1	-	129551	129449	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-164	SL_6KL_011_BRINE_1124153	+	36	138	RNA → PHA03252 (PHA03252)Methyltrn_RNA_3 (pfam02598) →
env-165	P_A23_Liq_2_Fmt_1045640	+	57	159	RNA → Methyltrn_RNA_3 (pfam02598) →
env-166	P_A23_Liq_1_Fmt_1009104	+	715	817	RNA → Methyltrn_RNA_3 (pfam02598) →
env-167	P_1C_Liq_1_UnCty_1002372	+	283	385	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038) →
env-168	P_A23_Liq_3_Fmt_1018522	-	551	449	RNA → Methyltrn_RNA_3 (pfam02598) →
env-169	P_2C_Liq_1_UnCty_1117457	-	344	242	RNA → Methyltrn_RNA_3 (pfam02598) →
env-170	P_A23_Liq_1_Fmt_1046280	-	249	147	RNA → Methyltrn_RNA_3 (pfam02598) →
env-171	P_A23_Liq_2_Fmt_1063179	-	245	143	RNA → Methyltrn_RNA_3 (pfam02598) →
env-172	P_2C_Liq_1_UnCty_1157684	-	265	163	RNA → Methyltrn_RNA_3 (pfam02598) →
env-173	SL_8KL_010_SED_10202168	-	335	236	RNA → Methyltrn_RNA_3 (pfam02598) →
Hru-1-1	NZ_BBJO01000003.1	-	101302	101203	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → hypo → hypo → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-174	P_1C_Sed_2_UnCty_1300983	+	148	247	RNA → Methyltrn_RNA_3 (pfam02598) →
Hru-2-1	NZ_BBJO01000060.1	+	9207	9306	RNA → Methyltrn_RNA_3 (pfam02598) → hypo → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-175	GSLNAS_F7109SK02H8ZT2	+	136	236	RNA → Methyltrn_RNA_3 (pfam02598) →
env-176	SL_6KL_011_BRINE_1005460	+	5299	5398	RNA → Methyltrn_RNA_3 (pfam02598) →
env-177	SL_6KL_011_BRINE_1051712	-	689	590	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-178	SL_4KL_010_BRINE_10003656	-	660	561	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-179	JXWS01003911.1	-	291	192	RNA → Methyltrn_RNA_3 (pfam02598) →
env-180	SL_6KL_011_BRINE_1016959	-	122	23	RNA → Methyltrn_RNA_3 (pfam02598) →
Nmo-1-1	NC_020388.1	-	578139	578040	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PolY_Pol_IV_kappa (cd03586)PRK12766 (PRK12766)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →

Hha-1-1	NZ_AJRK01000444.1	-	10548	10449	<p>RNA → Methyltrn_RNA_3 (pfam02598) → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → rpl22p (PRK04223)RplV (COG0091) → NT_POLXc (cd00141)RpsC (COG0092)rps3p (PRK04191)HHH_5 (pfam14520) → NT_POLXc (cd00141)RpsC (COG0092)rps3p (PRK04191)HHH_5 (pfam14520) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RplF (COG0097)rpl6p (PRK05518) → Lig (COG0272)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → Lig (COG0272)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) →</p>
Hha-1-2	NZ_AOMB01000043.1	-	108188	108089	<p>RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → NT_POLXc (cd00141)RpsC (COG0092)rps3p (PRK04191)HHH_5 (pfam14520) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → Lig (COG0272)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) →</p>
env-181	SL_4KL_010_BRINE_10212872	-	267	168	<p>RNA → Methyltrn_RNA_3 (pfam02598) →</p>

Hpa-1-1	NZ_AEMG01000030.1	-	41019	40920	RNA → Methyltrn_RNA_3 (pfam02598) → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → POP4 (COG1588)PRK03879 (PRK03879) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RplF (COG0097)rpl6p (PRK05518) → RecA (COG0468)rpl32e (PRK08562)Ribosomal_L32e (pfam01655)HHH_5 (pfam14520) → RecA (COG0468)rpl32e (PRK08562)Ribosomal_L32e (pfam01655)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
Hpa-1-2	NZ_AQXI01000001.1	-	1281236	1281137	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RecA (COG0468)rpl32e (PRK08562)Ribosomal_L32e (pfam01655)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
Hci-1-1	NZ_JDTH01000001.1	+	807675	807774	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → UvrC (COG0322)Ribosomal_L32_L32e (cd00513)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-182	GRANPEH02G2JJD	+	188	287	RNA → MTH1 (COG2106) →
env-183	GQKUMWE02FE1GX	-	166	68	RNA → hypo →
env-184	GSLNARP_GFPJP1N02H7ZY7	-	182	83	RNA → Methyltrn_RNA_3 (pfam02598) →
env-185	SL_5KL.010_BRINE.10021216	+	2341	2440	RNA → Methyltrn_RNA_3 (pfam02598) →

Nin-1-1	NZ_AOHZ01000041.1	-	187314	187215	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → RpmC (COG0255) PRK14549 (PRK14549) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) S4 (cd00165) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → RplE (COG0094) rpl5p (PRK04219) → RpsN (COG0199) rps14P (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → RecA (COG0468) Rpl32e (COG1717) rpl32e (PRK08562) HHH_5 (pfam14520) → rpl19e (PRK08570) Ribosomal_L19e (pfam01280) →
env-186	SL_4KL_010_BRINE_10024882	-	1898	1799	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplD (COG0088) rpl4p (PRK04042) →
env-187	ADL20m3uS_GFI381O02JC3VL	+	316	416	RNA →
env-188	SL_6KL_011_BRINE_1000304	+	9714	9813	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplD (COG0088) rpl4p (PRK04042) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) S4 (pfam01479) Ribosomal_S4e (pfam00900) → RplE (COG0094) rpl5p (PRK04219) → RpsN (COG0199) rps14P (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → UvrC (COG0322) Rpl32e (COG1717) rpl32e (PRK08562) HHH_5 (pfam14520) → rpl19e (PRK08570) Ribosomal_L19e (pfam01280) →
env-189	SL_8KL_010_SED_10375651	-	274	175	RNA → Methyltrn_RNA_3 (pfam02598) →
env-190	SL_6KL_011_BRINE_1014318	-	155	56	RNA → Methyltrn_RNA_3 (pfam02598) →
env-191	SL_8KL_010_SED_10000480	+	6111	6210	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → RpmC (COG0255) PRK14549 (PRK14549) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) S4 (pfam01479) Ribosomal_S4e (pfam00900) → RplE (COG0094) rpl5p (PRK04219) → RpsN (COG0199) rps14P (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → PRK12766 (PRK12766) UvrC (COG0322) Rpl32e (COG1717) → rpl19e (PRK08570) Ribosomal_L19e (pfam01280) → RplR (COG0256) rpl18p (PRK08569) → RpsE (COG0098) rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657) rpl30p (PRK06049) → rpl15p (PRK06419) Ribosomal_L27A (pfam00828) → SecY (COG0201) PRK08568 (PRK08568) →
env-192	SL_4KL_010_BRINE_10005807	-	721	622	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) →

Hla-1-1	NZ_AGFZ01000103.1	-	104403	104304	<p>RNA → Methyltrn_RNA_3 (pfam02598) → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RplF (COG0097)rpl6p (PRK05518) → RecA (COG0468)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → RecA (COG0468)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) →</p>
Hla-1-2	NZ_AOLZ01000040.1	-	62859	62760	<p>RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RecA (COG0468)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → RecA (COG0468)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) →</p>
env-193	SL_5KL_010_BRINE.10000580	-	14326	14227	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)UvrC (COG0322)Rpl32e (COG1717) →</p>
env-194	SL_5KL_010_SED.10042598	+	887	986	<p>RNA → Methyltrn_RNA_3 (pfam02598) →</p>
env-195	SL_4KL_010_BRINE.10006165	+	1728	1827	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) →</p>
Hac-1-1	NZ_BATA01000095.1	+	7771	7870	<p>RNA → MTH1 (COG2106) → hypo → hypo →</p>

Hac-1-2	NZ_BANO01000013.1	-	14331	14232	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rps17p (PRK08572)Ribosomal_S17 (pfam00366) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) →
env-196	ADL20m3uS_GFI381O02IYW5A	-	121	22	RNA → MTH1 (COG2106) →
env-197	2140918017-63356	-	193	94	RNA → hypo →
env-198	GQKUMWE02GP8XW	-	475	376	RNA → Methyltrn_RNA_3 (pfam02598) →
Hsp-2-1	NZ_CP007060.1	+	2200475	2200574	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-199	APHM01006302.1	-	1366	1273	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) →
env-200	LTJ07As871.J07ABscf092781	+	25242	25335	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → hypo → PRK12766 (PRK12766)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
Hsu-1-1	NZ_CP008874.1	-	1720180	1720081	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RecA (COG0468)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-201	P_A23_Liq_1.Fmt_1021786	-	270	171	RNA → Methyltrn_RNA_3 (pfam02598) →
env-202	P_A23_Liq_2.Fmt_1024942	-	260	161	RNA → Methyltrn_RNA_3 (pfam02598) →
env-203	P_A23_Liq_3.Fmt_1011772	+	655	754	RNA → Methyltrn_RNA_3 (pfam02598) →
Hca-1-1	NZ_AOLS01000002.1	-	28213	28114	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → rpl4p (PRK04042)Ribosomal_L4 (pfam00573) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RplR (COG0256)rpl18p (PRK08569) →

Nas-1-1	NZ_AOIO01000023.1	-	59520	59421	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → Rpl32e (COG1717) →</p>
Noc-1-1	NC_019974.1	-	3406135	3406036	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → UvrC (COG0322)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) →</p>
Nje-1-1	NZ_AOIA01000019.1	+	36830	36929	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RecA (COG0468)Rpl32e (COG1717)HHH_5 (pfam14520) →</p>
Nam-1-1	NZ_AOIB01000037.1	-	63552	63453	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → UvrC (COG0322)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
env-210	SL_5KL_010_BRINE_10002219	+	679	778	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219)SDH (cd12188) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034) →</p>
env-211	SL_5KL_010_BRINE_10004382	+	5582	5681	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →</p>

Nch-1-1	NZ_AOIN01000067.1	+	25511	25610	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) →
Nae-1-1	NZ_AOIP01000033.1	-	55488	55389	RNA → PRK13493 (PRK13493) Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) →
env-214	SS_3KL_010_SOIL_10059833	-	123	24	RNA → Methyltrn_RNA_3 (pfam02598) →
env-215	SL_3KL_010_SED_10538221	+	53	152	RNA → MTH1 (COG2106) →
env-216	P_1C_Sed_2_UnCty_1120614	-	293	194	RNA → Methyltrn_RNA_3 (pfam02598) →
Hni-1-1	NZ_AOMA01000004.1	+	593	692	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) →
Has-1-1	NZ_AOIQ01000021.1	+	411355	411454	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → UvrC (COG0322)HHH_5 (pfam14520) → hyp0 →
env-217	2140918027-11734	-	146	47	RNA → Methyltrn_RNA_3 (pfam02598) →

Nal-2-1	NZ_JNCS01000001.1	-	130682	130583	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)UvrC (COG0322)Rpl32e (COG1717) →</p>
Nal-1-1	NZ_AOIK01000025.1	+	71137	71236	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)UvrC (COG0322)Rpl32e (COG1717) →</p>
Npa-1-1	NZ_AOII01000067.1	-	29396	29297	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → UvrC (COG0322)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) →</p>
Nga-1-1	NZ_AOIJ01000042.1	-	42266	42167	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RecA (COG0468)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Nsp-2-1	NZ_AJVG01000002.1	-	354632	354533	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RecA (COG0468)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>

Nsp-1-1	NC_018224.1	-	1817666	1817567	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RecA (COG0468)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Htu-1-1	NC_013743.1	+	2295636	2295735	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)UvrC (COG0322)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hsa-8-1	NZ_AOIS01000045.1	-	15715	15616	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)UvrC (COG0322)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hth-2-1	NZ_AOIR01000063.1	+	173689	173788	<p>RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → UvrC (COG0322)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>

Hje-2-1	NZ_JDTG01000014.1	+	597395	597494	<p>RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → UvrC (COG0322)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Nve-1-1	NZ_AOID01000027.1	+	70079	70178	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)UvrC (COG0322)Rpl32e (COG1717) →</p>
Hli-3-1	NZ_AOIT01000030.1	+	41883	41982	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RecA (COG0468)rpl32e (PRK08562)Ribosomal_L32e (pfam01655)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hxa-1-1	NC_015666.1	-	345106	345007	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RecA (COG0468)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>

Hgo-1-1	NZ_HG315690.1	+	2029000	2029099	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → UvrC (COG0322)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) →
env-218	SL_5KL_010_BRINE_10298960	+	132	231	RNA → Methyltrn_RNA_3 (pfam02598) →
env-219	SL_4KL_010_BRINE_10234182	+	69	168	RNA → MTH1 (COG2106) →
env-220	GSLNARP_GFPJP1N02GH0H6	+	114	213	RNA → MTH1 (COG2106) →
env-221	SL_5KL_010_BRINE_10027796	+	1534	1633	RNA → Methyltrn_RNA_3 (pfam02598) →
Hsa-6-1	NZ_ALJD01000008.1	+	211183	211282	RNA → Methyltrn_RNA_3 (pfam02598) → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rps17p (PRK08572)Ribosomal_S17 (pfam00366) → rps17p (PRK08572)Ribosomal_S17 (pfam00366) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-222	SL_4KL_010_BRINE_10138442	+	547	646	RNA → Methyltrn_RNA_3 (pfam02598) →
env-223	GSLNARP_GFPJP1N02IH3RV	+	123	222	RNA → MTH1 (COG2106) →
env-224	GSLNARP_GFPJP1N02G85LW	-	148	49	RNA →
env-225	CEQN01112068.1	-	3026	2927	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → rpl2p (PRK09612)Ribosomal_L2 (pfam00181)Ribosomal_L2.C (pfam03947) →
env-226	CEUZ01492716.1	+	1180	1279	RNA → MTH1 (COG2106) →
env-227	CEWR01279639.1	-	119	20	RNA → Methyltrn_RNA_3 (pfam02598) →
env-228	APHM01021436.1	-	16571	16472	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-229	LTJ07As871_J07ABscf098859	-	1081824	1081725	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-230	JXWS01149363.1	-	957	858	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-231	3300000032_0007378	-	20967	20877	RNA → RplC (COG0087)rpl3p (PRK04231) → rpl4p (PRK04042)Ribosomal_L4 (pfam00573) →
env-232	3300000568_10935138	+	219	307	RNA → AF6_RA_repeat2 (cd01781) →
env-233	2232068851	-	371	281	RNA → ←-hypo

env-234	3300000558_10378615	+	2773	2863	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → rpl2p (PRK09612)Ribosomal_L2 (pfam00181) →
env-235	3300000568_10054768	+	16095	16185	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →
env-236	3300001580_10000682	+	16095	16185	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →
env-237	WSSedB2T_c028865	-	329	244	RNA → ←-hypo
env-238	JGI24020J35080_1001304	-	6969	6882	RNA → PRK05883 (PRK05883)Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) →
env-239	JGI24019J35510_1000070	-	95685	95598	RNA → PRK05883 (PRK05883)Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → Rpl32e (COG1717)rpl32e (PRK08562)HHH (pfam00633)HHH_L5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →
env-240	PBDCA2_contig02310	+	406	502	RNA → Methyltrn_RNA_3 (pfam02598) →
env-241	LGVC01039323.1	+	218	314	RNA → lepA (TIGR01393)Methyltrn_RNA_3 (pfam02598) →

env-242	JGI24730J26740_1000024	-	31005	30928	RNA→ RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→ RplW (COG0089)PRK14548 (PRK14548)→ RplB (COG0090)rpl2p (PRK09612)→ rps19p (PRK04038)Ribosomal_S19 (pfam00203)→ rpl22p (PRK04223)RplV (COG0091)→ RpsC (COG0092)rps3p (PRK04191)→ PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427)→ POP4 (COG1588)PRK03879 (PRK03879)→ RpsQ (COG0186)rps17p (PRK08572)→ rpl14p (PRK08571)Ribosomal_L14 (pfam00238)→ rpl24p (PRK01191)KOW_RPL26 (cd06089)→ PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900)→ rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673)→ RpsN (COG0199)rps14p (PRK05766)→ rps8p (PRK04034)RpsH (COG0096)→ RplF (COG0097)rpl6p (PRK05518)→ rpl32e (PRK08562)Ribosomal_L32e (pfam01655)→ rpl19e (PRK08570)Ribosomal_L19e (pfam01280)→ RplR (COG0256)rpl18p (PRK08569)→ RpsE (COG0098)rps5p (PRK04044)→
env-243	JGI24729J20445_1009152	+	2242	2319	RNA→
env-244	3300001580_10004676	+	12012	12089	RNA→ RplC (COG0087)rpl3p (PRK04231)→
env-245	3300001592_10154490	-	853	774	RNA→ ←-hypo
env-246	3300000032_0003629	-	1709	1630	RNA→ RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→
env-247	3300000568_10010498	-	796	717	RNA→ hypo→ rpl3p (PRK04231)Ribosomal_L3 (pfam00297)→
env-248	3300000558_10003870	-	1201	1122	RNA→ rpl3p (PRK04231)Ribosomal_L3 (pfam00297)→ rpl3p (PRK04231)Ribosomal_L3 (pfam00297)→
env-249	3300001592_10087609	+	1266	1344	RNA→
env-250	3300001567_10002847	+	2463	2541	RNA→ RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→ RplW (COG0089)PRK14548 (PRK14548)→ RplB (COG0090)rpl2p (PRK09612)→ RpsS (COG0185)rps19p (PRK04038)→ rpl22p (PRK04223)RplV (COG0091)→ RpsC (COG0092)rps3p (PRK04191)→ PRK14549 (PRK14549)Ribosomal_L29 (pfam00831)→ PRK03879 (PRK03879)UPF0086 (pfam01868)→ RpsQ (COG0186)rps17p (PRK08572)→ rpl14p (PRK08571)Ribosomal_L14 (pfam00238)→ rpl24p (PRK01191)KOW_RPL26 (cd06089)→ PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900)→ RplE (COG0094)rpl5p (PRK04219)→
env-251	SL_3KL_010_SED_10010201	-	3562	3491	RNA→ RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→ RplW (COG0089)PRK14548 (PRK14548)→ RplB (COG0090)rpl2p (PRK09612)→ RpsS (COG0185)rps19p (PRK04038)→ hypo→
env-252	SL_3KL_010_SED_10013818	-	1092	1021	RNA→ rpl3p (PRK04231)Ribosomal_L3 (pfam00297)→
env-253	SL_3KL_010_SED_10042920	+	1511	1582	RNA→ RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→
env-254	BDMC2_FXAG6RB01ERNKC	-	187	100	RNA→ hypo→
env-255	JGI24730J26740_1038966	-	597	511	RNA→ ←-hypo
env-256	3300000568_10019878	+	535	613	RNA→ hypo→
env-257	3300001592_10003410	-	16086	16008	RNA→ RplC (COG0087)rpl3p (PRK04231)→ RplD (COG0088)rpl4p (PRK04042)→ RplW (COG0089)PRK14548 (PRK14548)→ rpl2p (PRK09612)Ribosomal_L2_C (pfam03947)→ RpsS (COG0185)rps19p (PRK04038)→ rpl22p (PRK04223)RplV (COG0091)→ RpsC (COG0092)rps3p (PRK04191)→ PRK14549 (PRK14549)Ribosomal_L29 (pfam00831)→ PRK03879 (PRK03879)UPF0086 (pfam01868)→ RpsQ (COG0186)rps17p (PRK08572)→ rpl14p (PRK08571)Ribosomal_L14 (pfam00238)→ RplX (COG0198)rpl24p (PRK01191)→ PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900)→ RplE (COG0094)rpl5p (PRK04219)→ RpsN (COG0199)rps14p (PRK05766)→ rps8p (PRK04034)RpsH (COG0096)→ RplF (COG0097)rpl6p (PRK05518)→ rpl32e (PRK08562)Ribosomal_L32e (pfam01655)→ rpl19e (PRK08570)Ribosomal_L19e (pfam01280)→ RplR (COG0256)rpl18p (PRK08569)→ RpsE (COG0098)rps5p (PRK04044)→

env-258	3300001567_10001101	+	23848	23926	<p>RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → rpl2p (PRK09612)Ribosomal_L2.C (pfam03947) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →</p>
env-259	3300000558_10195618	+	1540	1618	<p>RNA → hypo →</p>
env-260	3300000032_0041450	-	12420	12342	<p>RNA → hypo →</p>
env-261	JGI24713J26584_10001748	-	5737	5659	<p>RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → rpl2p (PRK09612)Ribosomal_L2.C (pfam03947) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) →</p>
env-262	JGI24714J26587_10004747	+	2188	2266	<p>RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → rpl2p (PRK09612)Ribosomal_L2.C (pfam03947) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) →</p>
env-263	JGI24504J29685_1004785	+	209	287	<p>RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → rpl2p (PRK09612)Ribosomal_L2.C (pfam03947) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281) →</p>
env-264	JGI24505J29691_1002356	+	209	287	<p>RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → rpl2p (PRK09612)Ribosomal_L2.C (pfam03947) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) →</p>
env-265	3300000507_100004	-	18302	18224	<p>RNA → hypo → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →</p>

env-266	3300000558_10023046	-	1376	1297	RNA → RplC (COG0087)rpl3p (PRK04231) →
env-267	3300001592_10042930	-	999	920	RNA → ←-hypo
env-268	3300000568_10983650	+	160	239	RNA → hypo →
env-269	3300000568_10052832	+	512	591	RNA → hypo →
env-270	3300000032_0016008	+	347	426	RNA → hypo →
env-271	JGI24711J26586_10020110	-	584	506	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-272	JGI24708J26588_10012893	+	2107	2185	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) →
env-273	JGI24710J26742_10008143	+	5280	5358	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) →
env-274	JGI24707J26582_10001803	+	2105	2183	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-275	JGI24712J26585_10006974	-	5713	5635	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) →
env-276	JGI24709J26583_10619039	+	43	121	RNA →
env-277	JGI24499J29688_1000702	+	823	901	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) →
env-278	JGI24707J26582_10000621	+	14235	14314	RNA → ←-hypo
env-279	JGI24708J26588_10001024	+	13186	13265	RNA → ←-hypo
env-280	JGI24713J26584_10000622	+	13651	13730	RNA → ←-hypo
env-281	JGI24714J26587_10000570	+	13186	13265	RNA → ←-hypo
env-282	JGI24712J26585_10002902	+	13100	13179	RNA → ←-hypo
env-283	JGI24711J26586_10000985	-	9166	9087	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →

env-284	JGI24709J26583_10001164	-	9166	9087	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
env-285	JGI24710J26742_10000974	+	13183	13262	RNA → ←-hypo
env-286	JGI24505J29691_1015564	+	211	290	RNA → ←-hypo
env-287	JGI24500J29687_10001710	+	1224	1303	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) →
env-288	JGI24502J29692_10012380	+	876	955	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) →
env-289	JGI24501J29690_1003097	+	211	290	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) →

env-290	JGI24503J29689_10009320	+	876	955	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) →
env-291	JGI24499J29688_1000521	+	876	955	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) →
env-292	JGI24712J26585_10029187	+	2386	2464	RNA → hypo →
env-293	JGI24711J26586_10244524	-	365	287	RNA → ←hypo
env-294	JGI24710J26742_10309618	-	365	287	RNA → ←hypo
env-295	JGI24500J29687_10002376	+	168	246	RNA → ←hypo
env-296	JGI24503J29689_10006492	+	104	182	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
Mbo-1-1	NC_018227.2	+	1712758	1712836	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) →
env-297	JGI24501J29690_1006097	+	749	827	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-298	JGI24707J26582_10054179	+	722	800	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-299	JGI24708J26588_10030031	+	1058	1136	RNA → ←hypo
env-300	JGI24709J26583_10416662	-	277	199	RNA → hypo →
env-301	JGI24502J29692_10003709	+	657	735	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-302	JGI24503J29689_10003031	+	41	119	RNA → ←hypo
env-303	JGI24710J26742_10068176	+	372	450	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-304	JGI24709J26583_10014213	+	553	631	RNA → hypo → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) →
env-305	JGI24502J29692_10002344	+	84	165	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-306	JGI24712J26585_10639760	+	51	132	RNA → ←hypo
env-307	JGI24711J26586_10552659	+	51	132	RNA → ←hypo
env-308	JGI24709J26583_10614246	+	51	132	RNA → ←hypo
env-309	JGI24710J26742_10664497	+	51	132	RNA → ←hypo

Mma-1-1	NC_009051.1	+	549081	549159	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32_L32e (cd00513) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →
Mse-1-1	NZ_JXOJ01000001.1	+	373962	374040	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → rpl2p (PRK09612)Ribosomal_L2_C (pfam03947) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →
Msp-1-1	NZ_JMIO01000016.1	+	890	968	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) → hypo →
env-310	JGI24712J26585_10057261	-	366	297	RNA → ←hypo
env-311	JGI24710J26742_10004413	-	10050	9981	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →
env-312	JGI24500J29687_10026414	+	210	279	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) →
env-313	JGI24501J29690_1062315	+	210	279	RNA → ←hypo

env-314	JGI24499J29688_1102173	+	190	259	RNA → ←-hypo
env-315	JGI24709J26583_10005356	-	7831	7762	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)Ribosomal_S8 (pfam00410) →
env-316	JGI24711J26586_10160586	+	77	146	RNA → ←-hypo
env-317	JGI24500J29687_10008301	+	42	123	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-318	JGI24502J29692_10009873	+	777	846	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-319	JGI24503J29689_10009607	+	112	181	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-320	JGI24712J26585_10076884	-	494	425	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-321	JGI24500J29687_10085663	+	72	141	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-322	JGI24711J26586_10010708	-	494	425	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
Mpa-1-1	NC_011832.1	+	459047	459117	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → rpl2p (PRK09612)Ribosomal_L2_C (pfam03947) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →
env-323	DHTCA2_GJDNVXK01BZYAY	-	259	189	RNA → hypo →
env-324	3300001580_10004417	+	2215	2285	RNA → hypo → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) →
env-325	3300001580_10080578	-	953	870	RNA → ←-hypo
env-326	2232135516	+	86	169	RNA →
env-327	3300000558_11733700	-	1392	1309	RNA → ←-hypo
env-328	3300000558_11835925	-	418	335	RNA →

env-329	3300000568_10049962	-	21413	21330	RNA → hypo → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → PRK14548 (PRK14548)Ribosomal_L23 (pfam00276) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-330	3300001605_10004100	-	1325	1242	RNA → ← hypo
env-331	3300000032_0004919	+	16062	16145	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → PRK14548 (PRK14548)Ribosomal_L23 (pfam00276) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)RPS4A (COG1471) → KOW (smart00739)KOW_RPS4 (cd06087) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-332	3300000185_104355	-	418	335	RNA →
Mfo-1-1	NC_019943.1	-	2583107	2583023	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-333	JGI20225J20221_1000316	-	54770	54691	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-334	BMHB3a_c145790	-	1545	1466	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-335	JGI24730J26740_1000194	-	6399	6320	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)RPS4A (COG1471) →

env-336	JGI24730J26740_1000273	-	21541	21462	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-337	2013874846	+	4629	4707	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) →
env-338	PRSSGFe2_Sequence0000003268	+	541	620	RNA → hypo →
env-339	WSSedL1Cam_c0014	-	25929	25851	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32_L32e (cd00513) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
CMe-1-1	NC_009712.1	+	517727	517802	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32_L32e (cd00513) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-340	3300001567_10001587	+	11347	11431	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-341	WSSedA2C_c003915	-	773	689	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-342	WSSedA1TJGI_c001789	-	1725	1641	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-343	WSSedB1B2_c003929	-	407	323	RNA →
env-344	WSSedA1Ba_1001899	-	3122	3038	RNA → ←hypo
env-345	WSSedA1Ba2_1001418	-	2992	2908	RNA → ←hypo
env-346	WSSedA1Ba3_1004880	-	2426	2342	RNA → ←hypo
env-347	WSSedA2Ca3_1003915	-	773	689	RNA → ←hypo
env-348	JGI20214J14112_1009109	+	1012	1096	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-349	JGI20213J14113_1038457	-	635	551	RNA → ←hypo
env-350	B3_all.c_Convs72656	+	183	267	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-351	3300000568_10104459	-	1600	1514	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-352	SakLake120mDRAFT_c0023947	-	758	684	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-353	3300000032_0022845	-	6964	6878	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-354	3300000568_10039005	-	399	313	RNA → ←hypo
env-355	3300001567_10000694	+	33701	33787	RNA → ←hypo
env-356	3300000558_11950893	-	214	128	RNA → ←hypo
env-357	JGI26437J51864_10016855	+	1418	1504	RNA →

env-358	WSSedA1Ba_1000820	-	2896	2810	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-359	JGI20214J14112_1000181	-	5712	5626	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) →
env-360	WSSedB2Ca_1001724	-	887	801	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-361	WSSedA2C_c001213	+	2849	2935	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-362	WSSedA1TJGL_c002576	+	889	975	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-363	WSSedB1B2_c000733	-	1648	1562	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-364	WSSedB2T_c003532	+	434	520	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-365	WSSedA1Ba2_1000822	-	2885	2799	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-366	WSSedA1Ba3_1000489	+	1543	1629	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → rpl18p (PRK08569) →
env-367	WSSedB2Ba_1001051	-	1502	1416	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-368	WSSedA2Ca3_1001213	+	2849	2935	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-369	JGI20213J14113_1000441	-	1013	927	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-370	JGI26437J51864_10613048	+	135	220	RNA → hypo →
env-371	3300000568_10163768	+	37	123	RNA → hypo →
env-372	JGI20213J14113_1352303	+	18	105	RNA → ←hypo
env-373	WSSedB1B2_c001061	-	813	728	RNA → hypo →
env-374	JGI26437J51864_10024878	+	905	990	RNA →
env-375	LWFCAn_GLQU6AQ01CDIKX	-	257	171	RNA → hypo →
env-376	JGI24732J26686_1167705	-	325	240	RNA → hypo →
env-377	JGI24732J26686_1058151	-	388	303	RNA → hypo →
env-378	GYO3UBL02HBW2K	-	172	86	RNA → hypo →
env-379	LWFCAn_GLO1YSU01C0WMX	+	42	125	RNA → ←hypo
env-380	3300000558_10014112	+	936	1015	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → rpl6p (PRK05518)Ribosomal_L6 (pfam00347) →
env-381	3300001580_10840377	-	216	137	RNA → ←hypo
env-382	JGI20214J14112_1015362	+	514	593	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-383	3300001605_10335424	-	366	287	RNA →
env-384	JGI26437J51864_10189827	+	91	170	RNA → ←hypo
env-385	JGI26437J51864_10656079	-	220	141	RNA → ←hypo

env-386	3300001580_10004519	-	9169	9090	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) →
env-387	3300000032_0388072	-	284	205	RNA →
env-388	3300001605_10952026	+	300	379	RNA → ←-hypo
env-389	B3_all.c.Cons98067	+	267	345	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-390	LWAnNiSIP_F624WLL02IC2DN	-	276	191	RNA → hypo →
env-391	LWAnN_F624WLL02IC2DN	-	276	191	RNA → hypo →
env-392	JGI24728J21555_1000024	+	55297	55372	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32_L32e (cd00513) → hypo → hypo → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-393	JGI24731J21663_1041451	+	763	838	RNA →
env-394	JGI24732J26686_1000141	+	22138	22213	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32_L32e (cd00513) → hypo → hypo → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-395	JGI24729J20445_1000265	-	14288	14211	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →

env-396	JGI24729J20445_1000376	-	22541	22464	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-397	JGI24732J26686_1000166	-	22911	22834	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-398	JGI24730J26740_1278979	+	62	139	RNA → ←-hypo
env-399	JGI20214J14112_1005972	+	608	694	RNA → hypo → RplC (COG0087)rpl3p (PRK04231) →
env-400	3300000558_10001908	-	3593	3508	RNA → hypo →
env-401	3300001605_12127170	+	26	111	RNA → hypo →
env-402	JGI24732J26686_1168257	-	324	239	RNA → hypo →
env-403	JGI24729J20445_1001367	-	9125	9040	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) →
env-404	JGI24730J26740_1168855	+	233	318	RNA → hypo →
env-405	JGI24728J21555_1218516	-	187	102	RNA → ←-hypo
env-406	JGI24729J20445_1004575	+	4026	4111	RNA →
env-407	WSSedA1Ba3_1333478	-	172	89	RNA → hypo →

Mli-2-1	NZ_CM001436.1	-	2884644	2884571	<p>RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) → rpl22p (PRK04223)RplV (COG0091) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)uL6_arch (TIGR03653) → RplF (COG0097)uL6_arch (TIGR03653) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → RpsE (COG0098)rps5p (PRK04044) →</p>
Mpe-1-1	NC_014507.1	+	2206565	2206637	<p>RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → hypo → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →</p>
Mpa-2-1	NZ_KN360930.1	-	82807	82734	RNA → ←-hypo
env-408	M940CN_1020281	+	3372	3442	RNA → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
Mmo-1-1	NZ_JOMF01000007.1	+	9542	9636	<p>RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →</p>
env-409	RUMENNODE.4185760_38501	-	73103	73009	<p>RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → KH (smart00322)archeal_30S_S3_KH (cd02411) → rps3p (PRK04191)Ribosomal_S3_C (pfam00189) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)Ribosomal_S4e (pfam00900) → PRK04313 (PRK04313)KOW_RPS4 (cd06087) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) →</p>

env-410	SL_5KL_010_SED_10008304	+	2725	2796	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-411	LCWY01003686.1	+	978	1049	RNA → hypo →
env-412	LCWZ01000078.1	+	773	844	RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034) → rps8p (PRK04034)Ribosomal_S8 (pfam00410) → RplF (COG0097)rpl6p (PRK05518) → hypo → Rpl32e (COG1717)rpl32e (PRK08562) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L30_like (cd00355)rpl30p (PRK06049) → Ribosomal_L7_archeal_euk (cd01657)rpl30p (PRK06049) → RplO (COG0200)rpl15p (PRK06419) →
Mco-1-1	NC_017034.1	+	1276328	1276418	RNA → MTH1 (COG2106) →
env-413	JGI24024J18818_10045249	+	1393	1489	RNA → Methyltrn_RNA_3 (pfam02598) →
env-414	LGVD01025758.1	-	1753	1657	RNA → Methyltrn_RNA_3 (pfam02598) →
env-415	ASHM260b_GM9OZ8V02GZRNU	+	167	263	RNA → hypo →
env-416	LGVE01111852.1	-	441	345	RNA → Methyltrn_RNA_3 (pfam02598) →
env-417	LGVF01232254.1	-	138	42	RNA → Methyltrn_RNA_3 (pfam02598) →
env-418	LG0V01013195.1	+	3349	3445	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)Ribosomal_L22 (pfam00237) → rps3p (PRK04191)Ribosomal_S3_C (pfam00189) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → Rpl32e (COG1717)rpl32e (PRK08562) →
env-419	LGVC01002321.1	+	1612	1708	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32_L32e (cd00513) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archeal_euk (cd01657)rpl30p (PRK06049) → RplO (COG0200)rpl15p (PRK06419) → SecY (COG0201)PRK08568 (PRK08568) → adk (PRK00279)ADK (cd01428) → COG1422 (COG1422)spore_lon_C (TIGR02903) → CmkB (COG1102)PRK04182 (PRK04182) → PRK04270 (PRK04270)PseudoU_synth_hDyskerin (cd02572)PUA (pfam01472) → hypo → hypo → hypo →

env-420	LGVD01004949.1	+	1392	1488	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → rpl4p (PRK04042)Ribosomal_L4 (pfam00573) → RplW (COG0089)PRK14548 (PRK14548) → rpl2p (PRK09612)Ribosomal_L2_C (pfam03947) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → rps3p (PRK04191)Ribosomal_S3_C (pfam00189) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32_L32e (cd00513) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → RpmD (COG1841)rpl30p (PRK06049) →
env-421	LGVE01002492.1	-	11696	11600	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rpl2p (PRK09612)Ribosomal_L2_C (pfam03947) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → rps3p (PRK04191)archeal_30S_S3_KH (cd02411) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)rpl5p (PRK04219)KOW_RPS4 (cd06087)Ribosomal_L5_C (pfam00673)Ribosomal_S4e (pfam00900) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → RplE (COG0094)rpl5p (PRK04219) → Rpl32e (COG1717)rpl32e (PRK08562) →
env-422	LGVF01002618.1	+	131	227	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) →
env-423	LGVE01240744.1	-	496	400	RNA → Methyltrn_RNA_3 (pfam02598) →
env-424	LGVF01231129.1	-	567	471	RNA → Methyltrn_RNA_3 (pfam02598) →
env-425	LGOV01087460.1	+	959	1055	RNA → Methyltrn_RNA_3 (pfam02598) →
env-426	LGVE01063670.1	+	1228	1324	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) →
env-427	LGVF01061963.1	+	239	335	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-428	WSSedA1Ba3_1023920	+	778	871	RNA → Methyltrn_RNA_3 (pfam02598) →
env-429	WSSedA1Ba_1038552	+	407	500	RNA → MTH1 (COG2106) →
Msh-1-1	NZ_JONQ01000008.1	-	165643	165550	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29_HIP (cd00427) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)S4 (cd00165)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-430	taComm3_C1244	-	4081	3988	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) →
env-431	JGI12104J13512_1002612	-	3904	3811	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)Ribosomal_L22 (pfam00237) →

env-432	JGI11944J13513_1000082	-	41802	41709	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) →
env-433	JGI20179J14886_1000343	-	1356	1263	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) →
env-434	3300001580_10791145	-	337	244	RNA → MTH1 (COG2106) →
env-435	3300000568_10023551	-	5356	5263	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RNA → MTH1 (COG2106)PRK10611 (PRK10611) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-436	3300001592_10171977	+	123	216	RNA → MTH1 (COG2106) →
env-437	3300000032_0536775	-	94	1	RNA →
env-438	3300001605_11573450	-	95	2	RNA → MTH1 (COG2106) →
env-439	3300001567_10002499	-	7097	7004	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → KOW (smart00739)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)Ribosomal_S4e (pfam00900) → RNA → MTH1 (COG2106) →
env-440	3300000558_10031507	-	264	171	RNA → MTH1 (COG2106) →
env-441	PCEOT_contig04628	+	1388	1481	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RNA → MTH1 (COG2106) →
env-442	JGI12104J13512_1100715	+	77	170	RNA → MTH1 (COG2106) →
Mco-2-1	NC_015416.1	-	2306426	2306333	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) →
env-443	JGI24730J26740_1002326	-	3281	3188	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) →

env-444	JGI24732J26686_1000856	+	2537	2630	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → RpmC (COG0255) PRK14549 (PRK14549) → POP4 (COG1588) PRK03879 (PRK03879) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) S4 (pfam01479) Ribosomal_S4e (pfam00900) → rpl5p (PRK04219) Ribosomal_L5 (pfam00281) Ribosomal_L5_C (pfam00673) → RpsN (COG0199) rps14p (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → rpl32e (PRK08562) Ribosomal_L32_L32e (cd00513) → rpl19e (PRK08570) Ribosomal_L19e (pfam01280) → RplR (COG0256) rpl18p (PRK08569) → RpsE (COG0098) rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657) rpl30p (PRK06049) → rpl15p (PRK06419) →
env-445	JGI24730J26740_1077952	-	136	43	RNA → MTH1 (COG2106) →
env-446	JGI24729J20445_1000277	+	15893	15986	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) S4 (cd00165) KOW_RPS4 (cd06087) → RplE (COG0094) rpl5p (PRK04219) → RpsN (COG0199) rps14p (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → rpl32e (PRK08562) Ribosomal_L32e (pfam01655) → rpl19e (PRK08570) Ribosomal_L19e (pfam01280) → RplR (COG0256) rpl18p (PRK08569) →
env-447	JGI24732J26686_1234070	+	153	246	RNA → MTH1 (COG2106) →
env-448	SakLake120mDRAFT_c0020500	-	1276	1183	RNA → Methyltrn_RNA_3 (pfam02598) →
env-449	JGI24730J26740_1097811	-	201	108	RNA → Methyltrn_RNA_3 (pfam02598) →
env-450	JGI20198J14950_1052355	+	64	157	RNA → MTH1 (COG2106) →
env-451	JGI24729J20445_1001989	-	4749	4656	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) →
env-452	JGI20214J14112_1145042	+	137	230	RNA → MTH1 (COG2106) →
env-453	JGI24732J26686_1001287	-	3712	3619	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → rpl2p (PRK09612) Ribosomal_L2 (pfam00181) → rpl2p (PRK09612) Ribosomal_L2_C (pfam03947) → RpsS (COG0185) rps19p (PRK04038) →
env-454	JGI24730J26740_1003612	-	4510	4417	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → KH (smart00322) archaeal_30S_S3_KH (cd02411) →
env-455	JGI24732J26686_1002014	+	4931	5024	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) →
env-456	taComm3_C551	-	847	754	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) →

env-457	JGI12104J13512_1000496	-	35195	35102	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →
env-458	JGI12104J13512_1006964	-	3599	3506	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → rps19p (PRK04038)Ribosomal_S19 (pfam00203) →
env-459	JGI11944J13513_1000282	+	18417	18510	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →
env-460	WSSedA2C_c029104	+	89	182	RNA → MTH1 (COG2106) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-461	WSSedA2Ca3_1029104	+	89	182	RNA → MTH1 (COG2106) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-462	WSSedA1TJGI_c020031	-	764	671	RNA → MTH1 (COG2106) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-463	WSSedA1Ba3_1007453	+	836	929	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → rpl4p (PRK04042)Ribosomal_L4 (pfam00573) →
env-464	JGI20213J14113_1028243	-	729	636	RNA → MTH1 (COG2106) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-465	JGI20214J14112_1082845	-	335	242	RNA → MTH1 (COG2106) →
env-466	JGI20214J14112_1065024	-	197	104	RNA → MTH1 (COG2106) →
env-467	3300000558_11706232	-	175	82	RNA → Methyltrn_RNA_3 (pfam02598) →
env-468	3300001605_10001574	+	12383	12476	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-469	2232004817	+	121	214	RNA → MTH1 (COG2106) →
env-470	3300000558_10046922	-	175	82	RNA → Methyltrn_RNA_3 (pfam02598) →
env-471	3300000032_0025728	-	2226	2133	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-472	3300000568_10127450	-	4713	4620	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) →

env-473	3300001580_10000904	+	13878	13971	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-474	3300001592_10239960	+	303	396	RNA → MTH1 (COG2106) →
env-475	3300001580_10151383	-	980	887	RNA → MTH1 (COG2106) →
Mha-1-1	NC_0117527.1	-	484979	484886	RNA → Methyltrn_RNA_3 (pfam02598) →
env-476	JGI12104J13512_1010054	+	871	964	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) →
env-477	SakLake120mDRAFT_c0004292	+	2569	2662	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) →
env-478	JXWW01104647.1	-	233	140	RNA → Methyltrn_RNA_3 (pfam02598) →
env-479	JGI24025J20009_10001050	-	20258	20165	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191)rne (PRK10811) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572)RING-CH-C4HC3_FANCL (cd16490) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) →
env-480	ASA129_contig07056	-	867	774	RNA → MTH1 (COG2106) →
env-481	JGI24020J35080_1000033	+	3315	3408	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → hypo → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) → adk (PRK00279)ADK (cd01428) → COG1422 (COG1422)PRK02201 (PRK02201) → CmkB (COG1102)PRK04182 (PRK04182) → PRK04270 (PRK04270)PseudoU_synth_hDyskerin (cd02572)PUA (pfam01472) → hypo → hypo → AAA (smart00382)CooC (cd02034)GTPase_EngA (TIGR03594) →

env-482	JGI24020J35080_1000258	+	14429	14513	RNA → MTH1 (COG2106)Raftlin (pfam15250) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → Rpl32e (COG1717)rpl32e (PRK08562)HHH (pfam00633)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) →
env-483	JGI20177J14857_1074829	-	299	212	RNA → MTH1 (COG2106) →
env-484	JGI20193J14888_1132815	-	101	14	RNA → Methyltrn_RNA_3 (pfam02598) →
env-485	JGI20191J14862_1083948	+	194	281	RNA → MTH1 (COG2106) →
env-486	JGI20195J14853_1011539	-	972	885	RNA → MTH1 (COG2106) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) →
env-487	JGI20179J14886_1000011	-	26349	26262	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) →
env-488	JGI20199J14953_1000018	+	6725	6812	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) →
env-489	JGI20201J14949_1002905	-	1578	1491	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → rpl4p (PRK04042) →
env-490	JGI20197J15001_1000199	-	8178	8091	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) →
env-491	JGI20197J15136_1000199	-	8178	8091	RNA → MTH1 (COG2106) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → POP4 (COG1588)PRK03879 (PRK03879) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → rpl5p (PRK04219)Ribosomal_L5 (pfam00281)Ribosomal_L5_C (pfam00673) →
env-492	AGCH01000237.1	-	413	326	RNA → MTH1 (COG2106) →
env-493	PermFrostAlaska.NODE_9622	-	413	326	RNA → MTH1 (COG2106) →

env-494	B3_all.c.Cons150562	-	21306	21219	RNA → MTH1 (COG2106) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → RpmC (COG0255) PRK14549 (PRK14549) → POP4 (COG1588) PRK03879 (PRK03879) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) S4 (pfam01479) Ribosomal_S4e (pfam00900) → rpl5p (PRK04219) Ribosomal_L5 (pfam00281) Ribosomal_L5_C (pfam00673) →
env-495	JGI20199J14953_1000162	+	190	277	RNA → MTH1 (COG2106) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → RpmC (COG0255) PRK14549 (PRK14549) → POP4 (COG1588) PRK03879 (PRK03879) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) →
env-496	JGI20198J14950_1000001	+	50351	50438	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → RpmC (COG0255) PRK14549 (PRK14549) → POP4 (COG1588) PRK03879 (PRK03879) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → RplX (COG0198) rpl24p (PRK01191) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → rpl5p (PRK04219) Ribosomal_L5 (pfam00281) Ribosomal_L5_C (pfam00673) →
env-497	JGI20200J14955_1011738	+	613	700	RNA → MTH1 (COG2106) →
env-498	JGI20201J14949_1007869	+	187	274	RNA → MTH1 (COG2106) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) →
env-499	JGI20197J15001_1000002	-	33762	33675	RNA → MTH1 (COG2106) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → RpmC (COG0255) PRK14549 (PRK14549) → POP4 (COG1588) PRK03879 (PRK03879) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → RplX (COG0198) rpl24p (PRK01191) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → rpl5p (PRK04219) Ribosomal_L5 (pfam00281) Ribosomal_L5_C (pfam00673) →
env-500	JGI20197J15136_1000002	-	33762	33675	RNA → MTH1 (COG2106) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → RpmC (COG0255) PRK14549 (PRK14549) → POP4 (COG1588) PRK03879 (PRK03879) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → RplX (COG0198) rpl24p (PRK01191) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → rpl5p (PRK04219) Ribosomal_L5 (pfam00281) Ribosomal_L5_C (pfam00673) →
env-501	AGCH01000005.1	-	11078	10991	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4p (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → RpmC (COG0255) PRK14549 (PRK14549) → POP4 (COG1588) PRK03879 (PRK03879) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) S4 (pfam01479) Ribosomal_S4e (pfam00900) →

env-502	PermFrostAlaska_NODE_6124	-	23466	23379	RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4lp (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → RpmC (COG0255) PRK14549 (PRK14549) → POP4 (COG1588) PRK03879 (PRK03879) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) S4 (pfam01479) Ribosomal_S4e (pfam00900) →
env-503	B3_all_c.Cons68376	-	6993	6906	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4lp (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → RpmC (COG0255) PRK14549 (PRK14549) → POP4 (COG1588) PRK03879 (PRK03879) →
env-504	JGI20179J14886_1002439	-	264	177	RNA → Methyltrn_RNA_3 (pfam02598) →
env-505	JGI24728J21555_1000539	+	10047	10116	RNA → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4lp (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → rpl5p (PRK04219) Ribosomal_L5 (pfam00281) Ribosomal_L5_C (pfam00673) → RpsN (COG0199) rps14p (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → rpl32e (PRK08562) Ribosomal_L32e (pfam01655) →
env-506	JGI24728J21555_1000541	-	9030	8961	RNA → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4lp (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → rpl5p (PRK04219) Ribosomal_L5 (pfam00281) Ribosomal_L5_C (pfam00673) → RpsN (COG0199) rps14p (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → rpl32e (PRK08562) Ribosomal_L32e (pfam01655) →
env-507	JGI24728J21555_1000542	-	9049	8980	RNA → RplC (COG0087) rpl3p (PRK04231) → RplD (COG0088) rpl4lp (PRK04042) → RplW (COG0089) PRK14548 (PRK14548) → RplB (COG0090) rpl2p (PRK09612) → RpsS (COG0185) rps19p (PRK04038) → rpl22p (PRK04223) RplV (COG0091) → RpsC (COG0092) rps3p (PRK04191) → PRK14549 (PRK14549) Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879) UPF0086 (pfam01868) → RpsQ (COG0186) rps17p (PRK08572) → rpl14p (PRK08571) Ribosomal_L14 (pfam00238) → rpl24p (PRK01191) KOW_RPL26 (cd06089) → PRK04313 (PRK04313) KOW_RPS4 (cd06087) Ribosomal_S4e (pfam00900) → rpl5p (PRK04219) Ribosomal_L5 (pfam00281) Ribosomal_L5_C (pfam00673) → RpsN (COG0199) rps14p (PRK05766) → rps8p (PRK04034) RpsH (COG0096) → RplF (COG0097) rpl6p (PRK05518) → rpl32e (PRK08562) Ribosomal_L32e (pfam01655) →
env-508	taComm3_C12988	+	619	703	RNA → rpl3p (PRK04231) Ribosomal_L3 (pfam00297) →

env-509	JGI12104J13512_1000732	+	3737	3822	<p>RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) → Ribosomal_L7_archaeal_euk (cd01657)rpl30p (PRK06049) → rpl15p (PRK06419)Ribosomal_L27A (pfam00828) → SecY (COG0201)PRK08568 (PRK08568) → AdkA (COG2019)PRK04040 (PRK04040) → DUF106 (pfam01956) → CmkB (COG1102)PRK04182 (PRK04182) → Lactamase_B (smart00849)DHPS-like_MBL-fold (cd07713) → RNA → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →</p>
env-510	JGI11944J13513_1000175	+	47191	47276	<p>RNA → hypo → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →</p>
Mta-1-1	NZ_AG1Y02000001.1	-	1752945	1752858	<p>RNA → hypo → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →</p>
env-511	taComm3_C1003	-	71292	71205	<p>RNA → hypo → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →</p>

env-512	JGI12104J13512_1000711	-	24857	24770	RNA → hypo → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →
env-513	JGI11944J13513_1000170	-	24861	24774	RNA → hypo → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → rpl32e (PRK08562)Ribosomal_L32e (pfam01655) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) → RplR (COG0256)rpl18p (PRK08569) → RpsE (COG0098)rps5p (PRK04044) →
Hbo-1-1	NC_014729.1	+	955608	955707	RNA → MethyItrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
Ngr-1-1	NC_019792.1	-	316138	316039	RNA → MethyItrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
Hje-1-1	NC_014297.1	+	971638	971737	RNA → MethyItrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →

Nma-1-1	NC_013922.1	+	222997	223096	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)S4 (cd00165)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) →</p>
Hal-1-1	NZ_AOLL01000031.1	-	14961	14862	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Hvo-1-1	NC_013967.1	-	2419949	2419850	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>
Nti-1-1	NZ_KB913017.1	-	3677377	3677278	<p>RNA → Methyltrn_RNA_3 (pfam02598) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplC (COG0087)rpl3p (PRK04231) → rpl3p (PRK04231)Ribosomal_L3 (pfam00297) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)S4 (pfam01479)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14P (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → PRK12766 (PRK12766)RecA (COG0468)Rpl32e (COG1717) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →</p>

Npe-1-1	NC_019962.1	+	854999	855098	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → RpmC (COG0255)PRK14549 (PRK14549) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → rpl24p (PRK01191)KOW_RPL26 (cd06089) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) → UvrC (COG0322)Rpl32e (COG1717)rpl32e (PRK08562)HHH_5 (pfam14520) → rpl19e (PRK08570)Ribosomal_L19e (pfam01280) →
Hti-1-1	NC_021921.1	-	1979794	1979695	RNA → Methyltrn_RNA_3 (pfam02598) → RplC (COG0087)rpl3p (PRK04231) → RplD (COG0088)rpl4p (PRK04042) → RplW (COG0089)PRK14548 (PRK14548) → RplB (COG0090)rpl2p (PRK09612) → RpsS (COG0185)rps19p (PRK04038) → rpl22p (PRK04223)RplV (COG0091) → RpsC (COG0092)rps3p (PRK04191) → PRK14549 (PRK14549)Ribosomal_L29 (pfam00831) → PRK03879 (PRK03879)UPF0086 (pfam01868) → RpsQ (COG0186)rps17p (PRK08572) → rpl14p (PRK08571)Ribosomal_L14 (pfam00238) → RplX (COG0198)rpl24p (PRK01191) → PRK04313 (PRK04313)KOW_RPS4 (cd06087)Ribosomal_S4e (pfam00900) → RplE (COG0094)rpl5p (PRK04219) → RpsN (COG0199)rps14p (PRK05766) → rps8p (PRK04034)RpsH (COG0096) → RplF (COG0097)rpl6p (PRK05518) →

2.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 2.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one

cd00141 (6) Nucleotidyltransferase (NT) domain of family X DNA Polymerases. [D/E]
cd00165 (46) S4/Hsp/ tRNA synthetase RNA-binding domain; The domain surface is populated by conserved, charged residues that define a likely RNA-binding site; Found in stress proteins, ribosomal proteins and tRNA synthetases; This may imply a hitherto unrecognized functional similarity between these three protein classes.
cd00355 (1) Ribosomal protein L30, which is found in eukaryotes and prokaryotes but not in archaea, is one of the smallest ribosomal proteins with a molecular mass of about 7kDa.
cd00497 (22) Ribosomal L29 protein/HIP.
cd00513 (12) Ribosomal.L32.L32e: L32 is a protein from the large subunit that contains a surface-exposed globular domain and a finger-like projection that extends into the RNA core to stabilize the tertiary structure.
cd01428 (2) Adenylate kinase (ADK) catalyzes the reversible phosphoryl transfer from adenosine triphosphates (ATP) to adenosine monophosphates (AMP) and to yield adenosine diphosphates (ADP).
cd01513 (1) Domain III of Elongation factor (EF) Tu (EF-TU) and related proteins.
cd01657 (30) Ribosomal protein L7, which is found in archaea and eukaryotes but not in prokaryotes, binds domain II of the 23S rRNA as well as the 5S rRNA and is one of five ribosomal proteins that mediate the interactions 5S rRNA makes with the ribosome.
cd01781 (1) Ubiquitin domain of AT-6, second repeat.
cd02034 (1) The accessory protein CooC, which contains a nucleotide-binding domain (P-loop)

L4-Archaeoglobi RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 2.2.

near the N-terminus, participates in the maturation of the nickel center of carbon monoxide dehydrogenase (CODH).
cd02411 (7) K homology RNA-binding domain (KH) of the archaeal 30S small ribosomal subunit S3 protein.
cd02572 (2) Pseudouridine synthase, human dyskerin like.
cd03586 (1) DNA Polymerase IV/Kappa.
cd03694 (1) Domain II of the GTPBP family of GTP binding proteins.
cd06087 (219) KOW motif of Ribosomal Protein S4 (RPS4).
cd06089 (159) KOW motif of Ribosomal Protein L26.
cd07713 (1) Methanocaldococcus jannaschii dihydropteroate synthase, Thermoanaerobacter tengcongensis Tflp, and related proteins; MBL-fold metallo hydrolase domain.
cd12183 (4) Saccharopine Dehydrogenase NAD-binding and catalytic domains.
cd16490 (1) RING-CH finger, H2 subclass (C4HC3-type), found in Fanconi anemia group L protein (FANCL) and similar proteins.
COG0087 (255) Ribosomal protein L3 [Translation, ribosomal structure and biogenesis]
COG0088 (321) Ribosomal protein L4 [Translation, ribosomal structure and biogenesis]
COG0089 (310) Ribosomal protein L23 [Translation, ribosomal structure and biogenesis]
COG0090 (299) Ribosomal protein L2 [Translation, ribosomal structure and biogenesis]
COG0091 (269) Ribosomal protein L22 [Translation, ribosomal structure and biogenesis]
COG0092 (256) Ribosomal protein S3 [Translation, ribosomal structure and biogenesis]
COG0094 (188) Ribosomal protein L5 [Translation, ribosomal structure and biogenesis]

- COG0096** (210) Ribosomal protein S8 [Translation, ribosomal structure and biogenesis]
COG0097 (208) Ribosomal protein L6P/L9E [Translation, ribosomal structure and biogenesis]
COG0098 (59) Ribosomal protein S5 [Translation, ribosomal structure and biogenesis]
COG0185 (256) Ribosomal protein S19 [Translation, ribosomal structure and biogenesis]
COG0186 (242) Ribosomal protein S17 [Translation, ribosomal structure and biogenesis]
COG0198 (75) Ribosomal protein L24 [Translation, ribosomal structure and biogenesis]
COG0199 (213) Ribosomal protein S14 [Translation, ribosomal structure and biogenesis]
COG0200 (2) Ribosomal protein L15 [Translation, ribosomal structure and biogenesis]
COG0201 (25) Preprotein translocase subunit SecY [Intracellular trafficking, secretion, and vesicular transport]
COG0255 (60) Ribosomal protein L29 [Translation, ribosomal structure and biogenesis]
COG0256 (85) Ribosomal protein L18 [Translation, ribosomal structure and biogenesis]
COG0272 (4) NAD-dependent DNA ligase [Replication, recombination and repair]
COG0322 (25) Excinuclease UvrABC, nuclease subunit [Replication, recombination and repair]
COG0468 (99) RecA/RadA recombinase [Replication, recombination and repair]
COG1102 (4) Cytidylate kinase [Nucleotide transport and metabolism]
COG1222 (3) Uncharacterized archaeal membrane protein, DUF106 family, distantly related to YidC/Oxa1 [Function unknown]
COG1271 (2) Ribosomal protein S4E [Translation, ribosomal structure and biogenesis]
COG1555 (1) DNA uptake protein ComE and related DNA-binding proteins [Replication, recombination and repair]
COG1588 (34) RNase P/RNase MRP subunit p29 [Translation, ribosomal structure and biogenesis]
COG1717 (131) Ribosomal protein L32E [Translation, ribosomal structure and biogenesis]
COG1841 (1) Ribosomal protein L30/L7E [Translation, ribosomal structure and biogenesis]
COG2019 (2) Archaeal adenylate kinase [Nucleotide transport and metabolism]
COG2106 (89) Predicted RNA methylase MTH1, SPOUT superfamily [General function prediction only]
COG2251 (4) Predicted nuclease, RecB family [General function prediction only]
COG5271 (1) Midasin, AAA ATPase with vWA domain, involved in ribosome maturation [Translation, ribosomal structure and biogenesis]
pfam00181 (5) Ribosomal Proteins L2, RNA binding domain.
pfam00189 (3) Ribosomal protein S3, C-terminal domain.
pfam00203 (23) Ribosomal protein S19.
pfam00237 (3) Ribosomal protein L22p/L17e.
pfam00238 (239) Ribosomal protein L14p/L23e.
pfam00276 (4) Ribosomal protein L23.
pfam00281 (36) Ribosomal protein L5.
pfam00297 (180) Ribosomal protein L3.
pfam00347 (4) Ribosomal protein L6.
pfam00366 (3) Ribosomal protein S17.
pfam00410 (2) Ribosomal protein S8.
pfam00573 (16) Ribosomal protein L4/L1 family.
pfam00633 (2) Helix-hairpin-helix motif.
pfam00673 (35) ribosomal L5P family C-terminus.
pfam00828 (25) Ribosomal proteins 50S-L15, 50S-L18e, 60S-L27A.
pfam00831 (172) Ribosomal L29 protein.
pfam00900 (227) Ribosomal family S4e.
pfam01280 (169) Ribosomal protein L19e.
pfam01472 (2) PUA domain.
pfam01479 (47) S4 domain.
pfam01655 (63) Ribosomal protein L32.
pfam01868 (219) Domain of unknown function UPF0086.
pfam01956 (2) Integral membrane protein DUF106.
pfam02598 (347) Putative RNA methyltransferase.
pfam03947 (12) Ribosomal Proteins L2, C-terminal domain.
pfam04147 (1) Nop14-like family.
pfam09547 (1) Stage IV sporulation protein A (spore_IV_A).
pfam10559 (1) Plug domain of Sec61p.
pfam12226 (1) Turkey astrovirus capsid protein.
pfam14520 (61) Helix-hairpin-helix domain.
pfam15250 (1) Raftlin.
PHA03252 (1) DNA packaging tegument protein UL25; Provisional
PRK00279 (2) adenylate kinase; Reviewed
PRK01191 (235) 50S ribosomal protein L24P; Validated
PRK02201 (1) putative inner membrane protein translocase component YidC; Provisional
PRK03879 (253) ribonuclease P protein component 1; Validated
PRK04034 (214) 30S ribosomal protein S8P; Reviewed
PRK04038 (284) 30S ribosomal protein S19P; Provisional
PRK04040 (2) adenylate kinase; Provisional
PRK04042 (341) 50S ribosomal protein L4P; Provisional
PRK04044 (59) 30S ribosomal protein S5P; Reviewed
PRK04182 (4) cytidylate kinase; Provisional
PRK04191 (260) 30S ribosomal protein S3P; Reviewed
PRK04219 (226) 50S ribosomal protein L5P; Reviewed
PRK04223 (272) 50S ribosomal protein L22P; Reviewed
PRK04231 (435) 50S ribosomal protein L3P; Reviewed
PRK04270 (2) H/ACA RNA-protein complex component Cbf5p; Reviewed
PRK04313 (234) 30S ribosomal protein S4e; Validated
PRK05518 (209) 50S ribosomal protein L6P; Reviewed
PRK05766 (213) 30S ribosomal protein S14P; Reviewed
PRK05883 (2) acyl carrier protein; Validated
PRK06079 (32) 50S ribosomal protein L30P; Reviewed
PRK06419 (28) 50S ribosomal protein L15P; Reviewed
PRK07233 (1) hypothetical protein; Provisional
PRK08562 (116) 50S ribosomal protein L32e; Validated
PRK08568 (25) preprotein translocase subunit SecY; Reviewed
PRK08569 (86) 50S ribosomal protein L18P; Reviewed
PRK08570 (169) 50S ribosomal protein L19e; Reviewed
PRK08571 (240) 50S ribosomal protein L14P; Reviewed
PRK08572 (246) 30S ribosomal protein S17P; Reviewed
PRK09612 (316) 50S ribosomal protein L2P; Validated
PRK10575 (3) iron-hydroxamate transporter ATP-binding subunit; Provisional
PRK10611 (1) chemotaxis methyltransferase CheR; Provisional
PRK10811 (1) ribonuclease E; Reviewed
PRK12317 (1) elongation factor 1-alpha; Reviewed
PRK12442 (1) translation initiation factor IF-1; Reviewed
PRK12766 (86) 50S ribosomal protein L32e; Provisional
PRK13493 (1) chemoreceptor glutamine deamidase CheD; Provisional
PRK14548 (313) 50S ribosomal protein L23P; Provisional
PRK15749 (254) 50S ribosomal protein L29P; Provisional
smart00322 (6) K homology RNA-binding domain.
smart00382 (1) ATPases associated with a variety of cellular activities.

smart00739 (2) KOW (Kyprides, Ouzounis, Woese) motif.
smart00849 (1) Metallo-beta-lactamase superfamily.
TIGR01393 (1) elongation factor 4. [Unknown function, General]
TIGR02903 (1) ATP-dependent protease, Lon family. [Protein fate, Degradation of proteins, peptides, and glycopeptides, Cellular processes, Sporulation and germination]
TIGR03594 (1) ribosome-associated GTPase EngA. [Protein synthesis, Other]

TIGR03636 (2) ribosomal protein uL23, archaeal form. [Protein synthesis, Ribosomal proteins: synthesis and modification]
TIGR03653 (3) ribosomal protein uL6, archaeal form. [Protein synthesis, Ribosomal proteins: synthesis and modification]

2.4 Multiple-sequence alignment

Each L4-Archaeoglobi RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 2.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The L4-Archaeoglobi RNA itself is denoted by the line underneath marked 5’ and 3’ on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded green. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-Crick or G-U

pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, red nucleotides: nucleotide identity conserved more than 97% of the time, black nucleotides: 90%, gray nucleotides: 75%, red circle (◉): nucleotide is present 97% of the time, black circle (◐): 90%, gray circle (◑): 75%, white circle (○): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Hdi-2-1, Hgi-2-1, Hha-1-2, Hhi-1-1, Hje-2-1, Hla-1-2, Hla-3-1, Hma-1-1, Hme-1-2, Hpa-1-2, Hsa-3-1, Hsi-1-1, Hsp-1-1, Hsp-4-1, Hsp-5-1, Hte-2-1, Hvo-1-1, Hwa-2-1, Mco-2-1, Mhu-1-1, Nal-1-1, Nsp-1-1, env-100, env-111, env-112, env-12, env-121, env-124, env-125, env-132, env-133, env-141, env-142, env-143, env-144, env-16, env-162, env-163, env-168, env-171, env-177, env-18, env-19, env-192, env-194, env-195, env-20, env-200, env-202, env-205, env-208, env-21, env-211, env-212, env-213, env-22, env-229, env-230, env-234, env-235, env-236, env-239, env-26, env-262, env-263, env-264, env-267, env-273, env-276, env-279, env-280, env-281, env-282, env-283, env-284, env-285, env-286, env-287, env-288, env-289, env-290, env-291, env-294, env-299, env-300, env-301, env-302, env-307, env-308, env-309, env-311, env-312, env-313, env-314, env-319, env-327, env-328, env-329, env-330, env-336, env-342, env-343, env-344, env-345, env-346, env-347, env-348, env-362, env-363, env-364, env-365, env-366, env-367, env-368, env-369, env-388, env-391, env-393, env-394, env-396, env-397, env-398, env-401, env-404, env-411, env-412, env-417, env-419, env-42, env-420, env-421, env-422, env-424, env-426, env-427, env-431, env-432, env-438, env-447, env-453, env-454, env-457, env-458, env-459, env-46, env-461, env-463, env-47, env-470, env-473, env-48, env-487, env-488, env-489, env-490, env-491, env-493, env-494, env-496, env-497, env-498, env-499, env-500, env-501, env-502, env-503, env-506, env-507, env-51, env-510, env-513, env-52, env-53, env-60, env-61, env-66, env-67, env-68, env-69, env-7, env-73, env-75, env-85, env-9, env-97, har-1-1

alignment positions 1...79

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Mli-1-1 GUGAUGCCCCGGCUGCCCCUUAUGGGGGGCACAACCGAGAAGGACUCUAAUCCAGUCCCAAGGAGCUGACAGACGCUGGA
env-1 UUCCAGAUCCGUUCUCAUUCGUAUACGAAUAGAGACCAGAAAGGAGUUGUACAAACAACAGGGCUGAAUUAUGUGGA
env-2 CAAUGUCACGAAAGGAUAUACGGUUGGAGAAUUAAGAGAGGGAAUAGUACUCGAAAGGUCUAGCGAAGAGAAAGUAGGU
env-3 UAAUCUCGAUAAAACAACGGAAGUCGGGAAUUAAGAGAGGGGUUUGUUGUAGAGAAAGUUGGUGAUGAGAGAGUAGGU
env-4 AUCGGGGACGGAUCCCGUGCCCGGCAUGGUUAUGGGAACGAAUCCCGUCUUCGACCGGUGGCUGAUAAGACGCUGGG
env-5 AUCGGGGCGGAUCGCGGUGCCCGGCAUGGUUAUGGGAACGAAUCCCGUCUUCGACCGGUGGCUGAUAAGACGCUGGG
env-6 GAAUGUCCAUUAAGAGCCAUUUAAGCCUUGAAAUAAGAGCAUAAUUGCAUAAUUAAGCAUUGGGCUGAAAGAGUGGGA
env-8 UAAUUGAACCUAAUUCUGACUUUUUUCGGUCAAGACCGGGUCAUAAAUUGCUUUAUUGCAAUUGGGCUGAAAGAGUGGGA
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.....
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.....RR.....RRR.....RRR.....RRR.....GY.....RRR.....GG
.....
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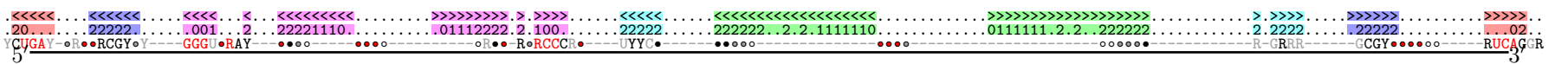

env-94 CCCGUUGCGGCUCUCGUCGACAGCCAGCCGAAUUCGUCGAGUCGGCUGUCAACACAGGAAUCGUGACCGAGGUCGGA
env-95 CCCGUUGCGGCUCUCGUCGACAGCCAGCCGAAUUCGUCGAGUCGGCUGUCAACACAGGAAUCGUGACCGAGGUCGGA
env-96 GCCCUUGCGGCUCUCGUCGACAGCCAGCCGAAUUCGUCGAGUCGGCUGUCAACACAGGAAUCGUGACCGAGGUCGGA
env-98 GCCCUUGCGGCUCUCGUCGACAGCCAGCCGAAUUCGUCGAGUCGGCUGUCAACACAGGAAUCGUGACCGAGGUCGGA
env-99 CCCAUUGCGGGUCUCGUCGACAGCCAGCCGAAUUCGUCGAGUCGGCUGUCAACACAGGAAUCGUGACCGAGGUCGGA
env-101 GCCGUCUCGCGUUUCGUCACAGAGGUGACCGACCCAGCGGACGGCUACACACCAAGGAAUCGUGACCAAGGUCGGA
env-102GCUACACACCAAGGAAUCGUGACCAAGGUCGGA
env-103GUAACGACCAAGGAAUCGUGACCAAGGUCGGA
env-104 GCUCGGGUUUUCGUCACAGACCGUAGCCGACCGGACGACCGGCUACACACCAAGGAAUCGUGACCAAGGUCGGA
env-105 CCGGUCUCGUCGACAGACCGUAGCCGUAUCAGACGACGACCGGCUACACCAAGGAAUCGUGACCAAGGUCGGA
env-106CAAGGAAUCGUGACCAAGGUCGGA
env-107GAGACCGUACCGGGGUCGUUACAAGAGGAAUCGUGACCGAGGUCGGA
env-108CGCGCGUCUCGUCGACCGGACCGGUUCGAGUCAUCGGAACUGCGAAGGAAUCGUGACCGAGGUCGGA
env-109 GCUCGCGUCUCGUCGACAGCCGUCGCGGACCGGUAUCGAGGUCGUAAGACAGGAAUCGUGACCGAGGUCGGA
CHa-1-1 CGUGCUCGCGCGAGUUGGCGGACUCACCGGCCCCGACGGGCGGAGCGACGACCGGAAUCGUGACCGAGGUCGGA
Hpa-2-1 CCUCGUCGUCGUCUACGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-110 GCUUCGCGCGGUCACAGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Nhu-1-1 GCUCGCGCGCAGUCACAGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-113 GCUCGCGGUCGUGGCGGACCGGUCGACCCCUAGCGGGAAAGAGUCGAAACACAGGAAUCGUGACCGAGGUCGGA
env-114 CCCGUUGCGGGUCUCGUCGACAGCCAGCCGAAUUCGUCGAGUCGGCUGUCAACACAGGAAUCGUGACCGAGGUCGGA
env-115 CCGGUUGCGGGUCUCGUCGACAGCCAGCCGAAUUCGUCGAGUCGGCUGUUAACACAGGAAUCGUGACCGAGGUCGGA
env-116CGGACGACCGGCUACACACCAAGGAAUCGUGACCAAGGUCGGA
env-117GAUCCAGGCGAUCGACCGGCUACACACCAAGGAAUCGUGACCAAGGUCGGA
env-118GACCGGCUACACACCAAGGAAUCGUGACCAAGGUCGGA
env-119 GCGCUCGCGGUUUUCGUCACAGACCGUAGCCGACCCAGCGGGCGGCUACACACCAAGGAAUCGUGACCAAGGUCGGA
env-120 UGUGCUCGCGCGUUGGUCAGACACCUCCGGCCAGACGGGCGGAGCUCGAGACGGAUCGUGACCGAGGUCGGA
env-122 CGUGCUCGCGCGUUGGUCAGACACCUCCGGCCAGACGGGCGGAGCUCGAGACGGAUCGUGACCGAGGUCGGA
env-123 CGUGCUCGCGCGUUGGUCAGACACCUCCGGCCAGACGGGCGGAGCUCGAGACGGAUCGUGACCGAGGUCGGA
env-126GCUACGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-127 CCUCGCGUCGCGUCUACGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-128 CCUCGCGUCGCGUCUACGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-129 GCUUCGCGCGUCUCACGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Hna-1-1 CCUUCGCGUCUCACGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-130 CCUUCGCGUCUCACGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-131 CCGCUCGCGGUCUCCCGACCGGUCGCGGUCGAAACGCGGAGUCGAGAAAGGAAUCGUGACCGAGGUCGGA
env-134 GCUCCGCGUCGUCACAGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-135GACGGGUCGAAUCUACCGGUCGCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Nph-1-1 GCUCGCGGUCGUCUACAGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-136 GCUCUCGUCGUCGUCGACAGCCGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-137 GCUCGCGUUCGUCUACAGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-138 GCUCGCGUACCAUGGCGGACCGGUCGCGCCCGACGCGGAGCGAGUCGACAAACACAGGAAUCGUGACCGAGGUCGGA
env-139GCGCGCUCGCGGACGGGAGGAGUCGACAAACACAGGAAUCGUGACCGAGGUCGGA
env-140 GCUUCGCGGUCUUGGCGGACCGGUCGCGCCCGACGGGCGGAGUCGACAAACACAGGAAUCGUGACCGAGGUCGGA
env-145 GCUCCGCGUUCGUGGCGGACCGGUCGCGCCCGACGGGCGGAGUCGAAACACAGGAAUCGUGACCGAGGUCGGA
env-146ACACAGGAAUCGUGACCGAGGUCGGA
env-147 GCUCGCGGUCGUCGUGGCGGACCGGUCGUCUCCUCGACGGGAGGAGUCGACAAACACAGGAAUCGUGACCGAGGUCGGA
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Hsp-9-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Hez-1-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-149AAGAGUCGAAACACAGGAAUCGUGACCGAGGUCGGA
env-150AAUCGAAACACAGGAAUCGUGACCGAGGUCGGA
env-151CAAGGAAUCGUGACCGAGGUCGGA
Hco-1-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
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env-154UCAGGAAUCGUGACCGAGGUCGGA
env-155CAGGAAUCGUGACCGAGGUCGGA
env-156 GAGUCGAAACACAGGAAUCGUGACCGAGGUCGGA
Hsp-10-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Hli-1-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Hte-1-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Hko-1-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Hli-2-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
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Hca-2-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Hsp-7-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Hha-2-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Hdi-1-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Hsa-9-1 CGCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Har-2-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-157CCAGCGGGNAGAGUCGAAACACAGGAAUCGUGACCGAGGUCGGA
env-158GUGACCGAGGUCGGA
env-159 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
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h3A-1-1 GCUUCGUGUCCGUCACGACCGGUCGCGCCCGACGGGAGCGAGUCGUAACACAGGAAUCGUGACCGAGGUCGGA
Hai-1-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-161 GCUCCGCGUUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
Hho-1-1 GCUCGCGGUCGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-164GUGAAACACAGGAAUCGUGACCGAGGUCGGA
env-165CAGGAAUCGUGACCGAGGUCGGA
env-166 GCUCGCGUACCAUGGCGGACCGGUCGCGCCCGACGGGAGCGAGUCGACAAACACAGGAAUCGUGACCGAGGUCGGA
env-167GGCGGACCGGUCGCGCCCGACGGGAGCGAGUCGACAAACACAGGAAUCGUGACCGAGGUCGGA
env-169CGGUGGCGGACCGGUCGCAUUCGAAACGAAUUCGGGUCGUUACAAGGAAUCGUGACCGAGGUCGGA
env-170GUGACCGAGGUCGGA

.....
.....RRR•••RRR•••RRR•••GY•R••RRGY•GGA

env-220 GCUUCGGCAGAGCCACAGACCGGCCUCGGGAUCCAGCGAUUCGGGGUCGUCAACACAGGGAUUCGUGACCGAGGUCGGA
 env-221 GCUCGGCCGCAUGUCACAGACCGGCCUCGAAUCGACGCGUUCGGGGUCGUCAAGCAAGGGAUUCGUGACCGAGGUCGGA
 Hsa-6-1 CCUGCCGGUCUCCCCACAGACCGGCCUCGAAUCAGACGCGUUCGGGGUCGUUAAACAGGGAUUCGUGACCGAGGUCGGA
 env-222 GCUCUUCGUCGCGACAGACCGGCCUCGGGAUCCAGCGUUCGGGGUCGUUAAAGCAGGGAUUCGUGACCGAGGUCGGA
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 env-224 UCUUAGAUCUUUACCACAGGCCGGCUCUGGUAUCAGAAUUCAGAGUCGUUAAAGCAAGGAUUCGUGACCGAGGUCGGA
 env-225 UCUUAGAUCUUUACCACAGGCCGGCUCUGGUAUCAGAAUUCAGAGUCGUUAAAGCAAGGAUUCGUGACCGAGGUCGGA
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 env-231 GUCGGGGUAGGCAUAGAGCGGUCAUACCUUUGCAUGAGUCGUGGUGAGCAUUAUCAACAGCUGACCGAGGUCGGA
 env-232 UCGGGGGUAGGCAUAGAGCGGUCAUACCUUUGCAUGAGUCGUGGUGAGCAUUAUCAACAGCUGACCGAGGUCGGA
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 env-237 CUCUAUAGGUGAGUCACUCCCGGAGGGAGUUAACCGGAAAGGAGUUGGGAUUAUCAACAGCGGUGACUAGUCGGA
 env-238 CCCUCCACUCAGAAUUCUCAUACUCCGUGAAAAGCGAGUGGAGGAGUUCGAGAGGAGUAGUCGUAAGGUCGGA
 env-240 CAUCCACCGUUCGCAUACCCUCUCAUACAGUUUGAAAAGAAUCGGAUUAACCGGAGGUAUUGUGACCAUAGUCGGG
 env-241 AUCAUUCGACCCUCACUGAUGGAGAUAUCCGGUUGGGGUCGUGGUCGCAAGACCAAAAGAGCGAGACAAAGUCGGA
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 env-252 AAGAGUAUACAUUCUGGUCACGUGGGGCGAGCCGAGAAAGGAGUUGUUAUCAACAGGGGUGACACAGUAGA
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 env-255 UUGGGGAUCCCGUCUCAUACUAGAGGGGGUUAUCCGAGAAAGGAGUUGUUAUCAACAGGGGUGACAGAGUAGG
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RR.....RRR.....RRR.....GY.....RRGY.....GGA

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env-353 UUGAU.AAGACGCAU...GGGUGGAC...GUUU...GAAC...AAAC.GAGCCCGU...UCCAA...UUGCUC...A.UGGAU...GGCCAUU...GUCAGGA
env-354 UUGAU.AAGACGCAU...GGGUGGAC...GUUU...GAAC...AAAC.GAGCCCGU...UCCAA...UUGCUC...A.UGGAU...GGCCAUU...GUCAGGA
env-355 UUGAU.AAGACGCAU...GGGUGGAC...GUUU...GAAC...AAAC.GAGCCCGU...UCCAA...UUGCUC...A.UGGAU...GGCCAUU...GUCAGGA
env-356 UUGAU.AAGACGCAU...GGGUGGAC...GUUU...GAAC...AAAC.GAGCCCGU...UCCAA...UUGCUC...A.UGGAU...GGCCAUU...GUCAGGA
env-357 UUGAC.CAGACGCAU...GGGUGGAC...GUUU...AAAC...AAAC.GAGCCCGU...UCCAC...GUGUUU...A.UGGAU...GGCCAUU...GUCAGGA
env-358 UUGAC.CAGACGCAU...GGGUGGAC...GUUU...GAAC...AAAC.GAGCCCGU...UCCAC...GUGUUU...A.UGGAU...GGCCAUU...GUCAGGA
env-359 UUGAC.CAGACGCAU...GGGUGGAC...GUUU...GAAC...AAAC.GAGCCCGU...UCCAC...GUGUUU...A.UGGAU...GGCCAUU...GUCAGGA
env-360 UUGAC.CAGACGCAU...GGGUGGAC...GUUU...GAAC...AAAC.GAGCCCGU...UCCAC...GUGUUU...A.UGGAU...GGCCAUU...GUCAGGA
env-361 UUGAC.CAGACGCAU...GGGUGGAC...GUUU...GAAC...AAAC.GAGCCCGU...UCCAC...GUGUUU...A.UGGAU...GGCCAUU...GUCAGGA
env-370 UUGAC.CAGACGCAU...GGGUGGAC...GUUU...GAAC...AAAC.GAGCCCGU...UCCAA...UUGCCCA...U.UGGAU...GGCCAUU...GUCAGGA
env-371 UUGAC.CAGACGCAU...GGGUGGAC...GUUU...GAAC...AAAC.GAGCCCGU...UCCAA...UUGCCUG...A.UGGAU...GGCCAUU...GUCAGGA
env-372 UUGAC.CGUAACGCAU...GGGUGGAC...GUUU...GAAC...AAAC.GAGCCCGU...UCCAA...AUGCUC...C.UGGAU...GGCCAUU...GUCAGGA
env-373 UUGAC.CGUAACGCAU...GGGUGGAC...GUUU...GAU...AGAC.GAGCCCGU...UCCAA...AUGCUCUA...C.UGGAU...GGCCAUU...GUCAGGA
env-374 UUGAC.CAGACGCAU...GGGUGGAC...GUU...AAAA...AAC.GAGCCCGU...UCCAU...CCGCUC...A.UGGAU...GGCCAUU...GUCAGGA




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env-443 CCAACAUGGGACACACCGGCUAUCAGCGGAUCUUGCGGUGUCUUCGGUCUCCGCCUCACGGGGCGUAGAUCAUUCUUGAGCAAAGAGUCAUUGGAAAGAUUAGAAUACAACAC
env-444 GCAGAUCCAGUCAGAAAGCGGAUCUUGCAGUGGUAUUCGGUCUCCUUCGCAAGGGCGUUGAUGCGUUCUUGAGCGAUGAAGCAAGGACAGGUUAUUGCAUGAUUAAACCAUUCGCA
env-445
env-446
env-448 AGCGAUCCAGCAAGCGAGGCCUUGCGGUGUCUUUGGCCUCCCAUCAAGAGGGCGUUGAUGCGUUCUUGAGUCGAGAUUUGUUGGAGAGAUUGUUAUGAUAACACCAUUCGCAUCA
env-449
env-450
env-451 UGGGUCAUUGGGCCAGAAGCGCGAUCUUGUGGUGGUAUUCGGUCACCCGCACGAGGGCGUAGAUUGCGUUCUUGAGUUGUAGAAAGCAAUUGGCAGAUUAGCAUGAUUAAACCAUUC
env-452
env-455 UAGGUCAUUGGACCGAGAAGCGCGAUCUUGCGGUGGUAUUCGGUCACCCAGCAGAGGGCGUAGAUUGCGUUCUUGAGUAAGAAAGCUUUGGCAGGUUAGCAUGAUUAAACCAUUC
env-456 UAGGUCAUUGGGCCAGAAGCGCGAUCUUGCGGUGGUAUUCGGUCACCCGCACGAGGGCGUAGAUUGCGUUCUUGAGUUGUAGCAAGAAAGCAAGGACAGCAUGAUUAAACCAUUC
env-460 UGGGUCAUUCUAGGCCAGAAGCGGUAUCUUGCGGUGGUAUUCGGUCACCCUCACGAGGGCGUAGAUUGCGUUCUUGAGCAAGAAACAAUGGACAGGUUAGCAUGAUUAAACCAUUC
env-462 UGGGUCAUUCUAGGCCAGAAGCGGUAUCUUGCGGUGGUAUUCGGUCACCCUCACGAGGGCGUAGAUUGCGUUCUUGAGCAAGAAACAAUGGACAGGUUAGCAUGAUUAAACCAUUC
env-464 UGGGUCAUUCUAGGCCAGAAGCGGUAUCUUGCGGUGGUAUUCGGUCACCCUCACGAGGGCGUAGAUUGCGUUCUUGAGCAAGAAACAAUGGACAGGUUAGCAUGAUUAAACCAUUC
env-465 UAGGUCAUUCUAGGCCAGAAGCGGUAUCUUGCGGUGGUAUUCGGUCACCCUCACGAGGGC
env-466
env-467
env-468 UCCAUAGGGCCGAAGGAGAAGGGGCUUGAGGUGGUCUUCGGUCUGCCCGCACGCGGGCGUUGAUGCGUUCUUGAGCAGCGAAACGAUGGAAAGAUUGCAUGAUUAAACCAUAC
env-469
env-471 UCCAUAGGGCCGANGGAGANGGGGCUUGAGGUGGUCUUCGGUCUGCCCGCACGCGGGCGUUGAUGCGUUCUUGAGCAGCGAAACGAUGGAAAGAUUGCAUGAUUAAACCAUAC
env-472 UCCAUAGGGCCGAAGGAGAAGGGGCUUGAGGUGGUCUUCGGUCUGCCCGCACGCGGGCGUUGAUGCGUUCUUGAGCAGCGAAACGAUGGAAAGAUUGCAUGAUUAAACCAUAC
env-474 UGGGUCAAGGGCCAAAGCGGUGGUCUGAGGUGGUCUUCGGUCUCCCGCACGCGGGCGUUGAUGCGUUCUUGAGCAGCGAAACGAUGGAAAGAUUGCGUUAUAAAC
env-475 UCCGCCAGGGCCAAAGGGGAGGUCUGGAAACUGGUCUACGGUAUUCGGUCUGCCCGCACGCGGGCGUUGAUGCGUUCUUGAGCAGCGAAACGAUGGAAAGAUUGCGUUAUAAAC
Mha-1-1 UCCGCCAGGGCCAAAGGGGAGGUCUGGAAACUGGUCUACGGUAUUCGGUCUGCCCGCACGCGGGCGUUGAUGCGUUCUUGAGCAGCGAAACGAUGGAAAGAUUGCGUUAUAAAC
env-476 UCCGCCAGGGCCAAAGGAGAGGUCUGGAAACUGGUCUACGGUCUCCCGCACGCGGGCGUUGAUGCGUUCUUGAGCAGCGAAACGAUGGAAAGAUUGCGUUAUAAACCAUUCGCA
env-477 UACGUCAAGGGCCAAAGCAUGGUCUGAGGUGGUCUUCGGUCUCCCGCACGCGGGCGUUGAUGCAUUCUUGAGCAGCGAAACGAUGGAAAGAUUGCGUUAUAAACCAUUCGCA
env-478
env-479 CCGUACACUGCAACCCUGGUGGGAUUAUUGGUUCAACAGCUGGGGGGUCGACCGGUUCUUGAGCGAAUUGAUGGAUAGAUUGCGUUAUACAACAUAUUCGCAUCAGGGAAC
env-480 CCGUACACCGCAACCUUGUGGCGAUAUUCGUUCAACAGCUGGGGGGUCGACCGGUUCUUGAGCGAAGAAUUGAUGGAUAGAUUGCGUUAUCAACAUAUUCGCAUCAGGGAAC
env-481 UGUCUUUAAGGACAGGGGAGACCGUGUAUAGUGUUCGGUUCACCAAGAAAGGACUAUCUGGAAUUGUGGAGAGAAUUGUUCGACGAGUGGUAACAUAUACCAUAUCAAAG
env-482 GUGUAUUAUUGGUCUGCCGAAAAGGAGUAUUGAUAUUGGAAAAGCAGGAAAAGUCGAUCUGAUGGAAUUGGAAUUCGUUCUGAACAGGGGACAGAAAGUGAGAAAC
env-483 GCUUGACAACCUUCGCUUUGGCCUCA
env-484
env-485
env-486 GCUUGACAACCUUCGCUUUGGCCUCAACACCGCGGAGUAGAAGCGCUUUAACCGAAGCGGGGCUUCGUAUCGAGGAAGCGUCAGACUUGUCGUUAUACAUAUUCGACCAAGG
env-492 GCUUGACAACCUUUGCUUUGGCCUCAACACCGCGGAGUAGAAGCGCUUUAACCGAAGCGGGGCUUCGUAUCGAGGAAGCGUCAGACUUGUCGUUAUACAUAUUCGACCAAGG
env-495 GCUUGA
env-504
env-505 AUAAGGUAUACUCUGGUCUCUGAUCUGGCAUCGACUAUCUAUUCUGGCGAAGCCGCUUUAUGAUCUGUAUCAGACAGAAGGACUGAUUGAAAACCCCAACGUAACAGACCCCGC
env-508 ACUCUAUACCGGUGUAACAACCGCGGAUAUAGGCGAGUUAACCGAUUAGUUCGCUUCGGCCAAAAGAAUUGGCCAACGUUCAGUCAUUGAGCAGGAUUGAUAUAGAACCC
env-509 UCACUAUCUCCGGUAUACUCUGGCCAAAGAGUAGGCGAAUUGACCCGGAUCGCGGAAAGGCCACCGCAGGUGGCUCCAGUGAACCGCACGUAAGGAUUGAUAUAGAAACCCCAA
Mta-1-1 CACAUCUCCGGUAUUGCUCUGGCCAAGAUAGGCGAAAAACCGGAAUACCGGUAUAGGGCCACAAGGAGUGGCCUGCGACACAUGCAAGUGCAGGAUUGAUAUAGAACCCCAAAGA
env-511 CACAUCUCCGGUAUUGCUCUGGCCAAGAUAGGCGAAAAACCGGAAUACCGGUAUAGGGCCACAAGGAGUGGCCUGCGACACAUGCAAGUGCAGGAUUGAUAUAGAACCCCAAAGA
env-512 CACAUCUCCGGUAUUGCUCUGGCCAAGAUAGGCGAAAAACCGGAAUACCGGUAUAGGGCCACAAGGAGUGGCCUGCGACACAUGCAAGUGCAGGAUUGAUAUAGAACCCCAAAGA
Hbo-1-1 AGCGGAAAGGGGCGACCGUCGUCUUCGGUUCACCCGUCGUGGGUUCACGACAUUCGCGGACUUCGCGGACUAGCAGCGGAAAGUCACAGUCAAACCCUCCGACCGUCCGGGUUCGACCUUG
Ngr-1-1 AGGGGACGGGAUGACCGUCGCUUCGCGGCGCCGAGAGAGGGCUGCCGACAUUCUUCGGAUUCGAGGGCGUUCGCAUCUUCGAGCGAGGAGGGGGGCGACGACGGAGUGGAAC
Hje-1-1 CCGACGGAACCGUCGCUUCGCGGUCGCGGGCGCGGAGACUAUCUGGACGUGAACCGCGAGGCGGUCGCGGACCAAGCGGGCGGAGGUGUCGAAACCGGCUUCGGACGG
Nma-1-1 AACCGGAUACUACCGCGACGGAUUCACAACGCGUUCGUGCGCCGAGAGAGGGCUGCCUUCGGAACUCGGAACUCGAGGAUACCCGUCGAGUCGUGUUCGCGGCAUUGCCAUUCG
Hal-1-1 CCGAUGCCGGCGCAUGACCGUCGUCUUCGGGUGCCGGCGGUGGCUUCGCGGACUUCGCGGACUUCGCGGGAUGCCUCCGAGGAUUGUUGCAGACGUCGAAACCUUCGUUGGCGGGGUUCGA
Nti-1-1 AACGGGACGGGAUGACCGUCGCUUCGCGGCGCCGCAACAGAGGGCUGCCGACAUUCUUCGACAUUCGAGGCUUCGCGUUCGCGCCCGCGGAUGAACGGGGCAGCGGACGAGGGAU
Npe-1-1 AGGGGGAUGGGAUGACCGUCGCUUCGCGGCGCCGCAACAGAGGGCUGCCGACAUUCUUCGACAUUCGAGGCAUUCGCGGUCGCGGGGCGCCGAAAGGACGCGGGCGGAGGAGCGG
Hti-1-1 CGUCGCGUGGCAUGAUCAGUCCGUUUGGCGCGCGGAGCGCGGUGCCGCUUUCUUCGCGGUCGAAACCGGGUGUCGUGCAACCGGUCACCGGUGACGAGUUGGCGGACGGCGU

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3 L13-Bacteroidia

3.1 Taxa

The taxonomy of each organism containing a putative L13-Bacteroidia RNA is listed, with abbreviations identifying each hit (e.g., “Eco-1-1” and “Eco-1-2” might hypothetically represent two distinct RNAs in *E. coli*). The abbreviations will be used to identify each individual L13-Bacteroidia RNA in Sections 3.2 and 3.4:

abbrev. of hits	taxonomy of species
Bsp-1-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Bacteroidaceae <i>Bacteroides</i> sp. Ga6A1
Bsp-2-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Bacteroidaceae <i>Bacteroides</i> sp. Ga6A2
Psp-1-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae <i>Alloprevotella</i> <i>Prevotella</i> sp. oral taxon 473 str. F0040
Pcl-1-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae <i>Paraprevotella clara</i> YIT 11840
Pxy-1-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae <i>Paraprevotella xylaniphila</i> YIT 11841
Hse-1-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae <i>Prevotella Hallelia seregens</i> ATCC 51272

Pal-1-1 to Pal-1-2	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella albensis</i> DSM 11370 = JCM 12258
Pam-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella amnii</i> CRIS 21A-A
Pam-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella amnii</i> DNF00058
Pam-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella amnii</i> DSM 23384
Pam-4-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella amnii</i> DSM 23384 = JCM 14753
Pau-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella aurantiaca</i> JCM 15754
Pba-1-1 to Pba-1-2	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella baroniae</i> DSM 16972 = JCM 13447
Pba-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella baroniae</i> F0067
Pbe-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella bergensis</i> DSM 17361
Pbi-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella bivia</i>
Pbi-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella bivia</i> DNF00188
Pbi-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella bivia</i> DNF00320
Pbi-4-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella bivia</i> DNF00650
Pbi-5-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella bivia</i> DSM 20514
Pbi-6-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella bivia</i> JCVIHMP010
Pbr-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella brevis</i> ATCC 19188
Pbr-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella brevis</i> P6B11
Pbr-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella bryantii</i> B14
Pbr-4-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella bryantii</i> C21a
Pbu-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella buccae</i>
Pbu-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella buccae</i> ATCC 33574
Pbu-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella buccae</i> D17
Pbu-4-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella buccalis</i> ATCC 35310
Pbu-5-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella buccalis</i> DNF00853
Pbu-6-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella buccalis</i> DNF00985
Pco-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella conceptionensis</i> 9403948
Pco-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella copri</i> DSM 18205
Pco-3-1 to Pco-3-2	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella corporis</i> DSM 18810 = JCM 8529
Pde-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella dentalis</i> DSM 3688
Pde-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella dantasini</i> JCM 15908
Pde-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella denticola</i> CRIS 18C-A
Pde-4-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella denticola</i> DNF00960
Pde-5-1 to Pde-5-2	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella denticola</i> DSM 20614 = JCM 13449
Pde-6-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella denticola</i> F0289
Pdi-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella disiens</i> DNF00882
Pdi-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella disiens</i> FB035-09AN
Pdi-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella disiens</i> JCM 6334 = ATCC 29426
Pen-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella enoeca</i> JCM 12259
Pfa-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella falsenii</i> DSM 22864 = JCM 15124
Pfu-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella fusca</i> JCM 17724
Phi-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella histicola</i> F0411
Phi-2-1 to Phi-2-2	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella histicola</i> JCM 15637 = DNF00424
Pin-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella intermedia</i> 17
Pin-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella intermedia</i> ATCC 25611 = DSM 20706
Pin-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella intermedia</i> ZT
Plo-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella loescheii</i> DSM 19665 = JCM 12249 = ATCC 15930
Pma-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella maculosa</i> DSM 19339
Pma-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella maculosa</i> DSM 19339 = JCM 15638
Pma-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella maculosa</i> OT 289
Pma-4-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella marshii</i> DSM 16973
Pma-5-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella marshii</i> DSM 16973 = JCM 13450
Pme-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella melaninogenica</i> ATCC 25845
Pme-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella melaninogenica</i> D18
Pme-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella melaninogenica</i> DNF00666
Pmi-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella micans</i> DSM 21469
Pmi-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella micans</i> DSM 21469 = JCM 16134
Pmi-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella micans</i> F0438
Pmu-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella multififormis</i> DSM 16608
Pmu-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella multisaccharivorax</i> DSM 17128
Pna-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella nanceiensis</i> DSM 19126
Pna-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella nanceiensis</i> DSM 19126 = JCM 15639
Pni-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella nigrescens</i> ATCC 33563
Pni-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella nigrescens</i> CC14M
Pni-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella nigrescens</i> F0103
Por-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella oralis</i> ATCC 33269

Por-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella oralis</i> CC98A
Por-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella oralis</i> HGA0225
Por-4-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella oris</i> C735
Por-5-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella oris</i> DSM 18711
Por-6-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella oris</i> DSM 18711 = JCM 12252
Por-7-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella oris</i> F0302
Por-8-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella oryzae</i> DSM 17970
Pou-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella oulorum</i> F0390
Pou-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella oulorum</i> JCM 14966
Ppa-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella pallens</i> ATCC 700821
Ppa-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella paludivivens</i> DSM 17968
Ppa-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella paludivivens</i> DSM 17968 = JCM 13650
Ppl-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella pleuritidis</i> F0068
Ppl-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella pleuritidis</i> JCM 14110
Pru-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella ruminicola</i> 23
Pru-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella ruminicola</i> Ga6B6
Psa-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella saccharolytica</i> F0055
Psa-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella salivae</i> DSM 15606
Psa-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella salivae</i> F0493
Psc-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella scopos</i> JCM 17725
Psh-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella shahii</i> DSM 15611 = JCM 12083
Psp-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> 109
Psp-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> AGR2160
Psp-4-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> BV3P1
Psp-5-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> C561
Psp-6-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> F0091
Psp-7-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> FD3004
Psp-8-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> HJM029
Psp-9-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> HUN102
Psp-10-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> ICM33
Psp-11-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> MA2016
Psp-12-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> MSX73
Psp-23-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp. oral taxon</i> 299 str. F0039
Psp-24-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp. oral taxon</i> 306 str. F0472
Psp-25-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp. oral taxon</i> 317 str. F0108
Psp-26-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp. oral taxon</i> 472 str. F0295
Psp-13-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> P4-65
Psp-14-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> P4-76
Psp-15-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> P5-119
Psp-16-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> P5-125
Psp-17-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> P5-60
Psp-18-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> P6B1
Psp-19-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> P6B4
Psp-20-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> RM4
Psp-21-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> S7 MS 2
Psp-22-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella sp.</i> S7-1-8
Pst-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella stercorea</i> DSM 18206
Pti-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella timonensis</i> 4401737 = DSM 22865 = JCM 15640
Pti-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella timonensis</i> CRIS 5C-B1
Pti-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella timonensis</i> S9-PR14
Pve-1-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella veroralis</i> DSM 19559
Pve-2-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella veroralis</i> DSM 19559 = JCM 6290
Pve-3-1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Prevotella veroralis</i> F0319
env-1 to env-1259	environmental samples					

3.2 Gene contexts

Each L13-Bacteroidia RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is

indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one L13-Bacteroidia RNA are assigned a color; other domains are gray. Information about these conserved domains is given in Section 3.3. The accession of the sequence containing each L13-Bacteroidia RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other

accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each L13-Bacteroidia RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 3.1.

abbrev.	Seq. accession		5′ at	3′ at	genes
env-1	AMCI01008330.1	-	1066	991	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-2	AUXO012860029.1	-	1571	1495	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-3	SRS011529_WUGC_scaffold.27015	-	1315	1235	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-4	RUMENNODE.4362630_1	+	14588	14659	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-5	scaffold15734_5_MH0046	+	243	321	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-6	SRMUA_GNVGR9Q01D7VOE	-	237	168	RNA → rplM (PRK09216)RplM (COG0102) →
env-7	AUXO010978888.1	+	545	616	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-8	SRS048164_C2255498	+	534	617	RNA →
env-9	scaffold6072_39_MH0053	+	450	533	RNA →
env-10	SRS019910_WUGC_scaffold.74502	+	208	291	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-11	scaffold204458_1_MH0006	-	1372	1304	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-12	UnmappedStool_Broad_scaffold.711238	-	140	72	RNA → hypo →
env-13	4491686.3.479386	-	127	205	RNA →
env-14	scaffold15346_2_O2.UC-24	+	302	371	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-15	HCF12C_103092	-	189	116	RNA →
env-16	AUXO015828536.1	+	340	412	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-17	DOM022_scaffold34730_2	-	1753	1684	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-18	scaffold19504_1_MH0036	-	69802	69732	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-19	scaffold4731_12_MH0057	-	597	527	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-20	DLM014_scaffold3130_5	-	5881	5811	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pxy-1-1	NZ_GL883827.1	-	169388	169318	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-21	SRS048164_WUGC_scaffold.29212	+	2023	2093	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-22	scaffold5875_2_MH0020	+	21461	21531	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-23	scaffold18015_8_MH0044	+	3289	3359	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-24	scaffold39182_1_MH0047	-	395	325	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-25	scaffold33768_3_MH0073	+	2463	2533	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-26	scaffold6160_1_V1.UC-19	+	273	343	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-27	scaffold2340_6_MH0035	+	477	547	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-28	scaffold54231_2_MH0050	+	1169	1239	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-29	scaffold58113_4_MH0056	-	1209	1139	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-30	scaffold2091_1_MH0058	-	156	86	RNA →
env-31	scaffold16985_10_MH0059	-	522	452	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-32	scaffold41222_2_MH0070	-	522	452	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-33	scaffold1773_9_MH0082	+	1494	1564	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-34	scaffold14401_2_O2.UC-12	+	160	230	rpsB (PRK05299)Ribosomal_S2 (pfam00318) →
env-35	4491401.3_NODE.125	+	6382	6452	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-36	4491414.3_NODE.4995	+	3654	3724	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-37	4491415.3_NODE.16304	-	35739	35669	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-38	4491417.3_NODE.72813	+	28708	28778	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-39	4491419.3_NODE.42377	-	198572	198502	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-40	4491477.3_NODE.70256	-	8117	8047	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →

env-41	DLM006_scaffold552.72	-	772	702	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-42	DLM028_scaffold52693.6	+	193	263	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-43	DOM010_scaffold9237.5	+	12401	12471	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-44	NLM008_scaffold4989.13	+	788	858	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-45	SRS011529_WUGC_scaffold_21913	+	1369	1439	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-46	SRS013521_LANL_scaffold_6003	-	8813	8743	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-47	SRS013687_C2637478	-	685	615	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-48	SRS013800_Baylor_scaffold_15627	+	1409	1479	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-49	SRS015133_WUGC_scaffold_36455	-	685	615	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-50	SRS015782_WUGC_scaffold_38346	+	1363	1433	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-51	SRS017307_Baylor_scaffold_15330	-	1112	1042	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-52	SRS017433_Baylor_scaffold_19937	-	547	477	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-53	SRS017701_Baylor_scaffold_13140	-	970	900	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-54	SRS023914_C2116633	-	685	615	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-55	SRS024435_LANL_scaffold_1171	-	1412	1342	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-56	SRS045004_LANL_scaffold_14319	+	1359	1429	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-57	SRS045645_C2019336	+	871	941	RNA →	
env-58	SRS047044_C1551280	-	547	477	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-59	SRS049712_C15572285	+	896	966	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-60	SRS049995_LANL_scaffold_2946	-	33940	33870	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-61	SRS063985_LANL_scaffold_39061	-	685	615	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-62	SRS078176_C2299272	-	333	263	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
Pcl-1-1	NZ_JH376625.1	+	66716	66786	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-63	scaffold5721_2.MH0077	-	792	722	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-64	scaffold32997_1.MH0002	-	109	39	RNA →	
env-65	scaffold77706_1.MH0069	-	138	68	RNA →	
env-66	NLM006_scaffold34944.6	+	1503	1573	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-67	NOF008_scaffold67812.2	-	140	70	RNA →	
env-68	NOF010_scaffold32157.6	+	458	528	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-69	SRS017821_Baylor_scaffold_12585	+	5448	5518	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-70	AUXO011504091.1	-	895	820	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-71	AUXO012576065.1	+	558	627	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-72	AUXO017805936.1	+	175	245	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-73	AUXO015702136.1	-	1049	974	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-74	AUXO010123457.1	+	71	143	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-75	CAM_READ_0099979911	+	161	230	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-76	NOM008_scaffold29131.6	-	3871	3801	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-77	AUXO013980254.1	-	161	92	RNA →	hypo →
env-78	AUXO014577836.1	-	989	916	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-79	2013414608	-	600	529	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rplM (PRK09216)Ribosomal.L13 (pfam00572) →
env-80	pre-rum113-01766	+	19308	19380	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
Pbr-3-1	NZ_ADWO01000013.1	-	1784	1707	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
Pbr-4-1	NZ_AUKF01000007.1	-	102040	101963	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-81	AUXO013781889.1	+	110	187	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-82	AUXO016535493.1	+	268	342	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-83	AUXO012398056.1	+	1683	1756	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-84	scaffold11907_5.MH0040	-	2845	2774	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-85	4491405.3.NODE_26186	+	3884	3955	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-86	scaffold25515_12.MH0059	+	284	355	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
env-87	AUXO015466288.1	+	1512	1584	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →
Pal-1-1	NZ_AUFP01000001.1	-	13559	13481	RNA →	rplM (PRK09216)Ribosomal.L13 (pfam00572) → rpsI (PRK00132)Ribosomal.S9 (pfam00380) →

Pal-1-2	NZ_BAJD01000011.1	+	60623	60701	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-88	SRS062878_C3036997	-	256	183	RNA → hypo → rplM (PRK09216)RplM (COG0102) →
env-89	Tongue_dor_WUGI_scaffold.10412	+	328	401	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-90	SRS014470_WUGC_scaffold.46671	-	1515	1442	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-91	SRS018439_C2372430	+	460	533	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-92	SRS019607_WUGC_scaffold.53821	-	2535	2462	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-93	SRS019894_C3844330	-	310	237	RNA → rplM (PRK09216)Ribosomal_L13 (cd00392) →
env-94	SRS047219_C2319273	+	489	562	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-95	SRS057539_LANL_scaffold.61402	-	1835	1762	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-96	SRS057791_C3471145	+	135	208	RNA →
env-97	SRS062544_LANL_scaffold.41679	-	1006	933	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-98	Throat_LANL_C5730482	+	257	330	RNA →
env-99	SRS011306_Baylor_scaffold.83447	+	6688	6761	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-100	SRS015038_C1882965	-	403	330	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-101	SRS015762_C3563104	-	158	85	RNA →
env-102	SRS015893_WUGC_scaffold.41335	-	2217	2144	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-103	SRS015941_C3475421	+	479	552	RNA → rplM (PRK09216) →
env-104	SRS016002_WUGC_scaffold.14080	-	451	378	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-105	SRS018357_Baylor_scaffold.26234	+	880	953	RNA → hypo →
env-106	SRS018591_WUGC_scaffold.33810	-	202	129	RNA → hypo →
env-107	SRS018739_C3556239	+	325	398	RNA →
env-108	SRS019022_C2654036	-	1005	932	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-109	SRS019026_C1997533	-	401	328	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-110	SRS019027_WUGC_scaffold.18825	+	340	413	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-111	SRS019045_WUGC_scaffold.59681	-	2127	2054	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-112	SRS019974_Baylor_scaffold.58098	+	480	553	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-113	SRS020856_C2589008	+	484	557	RNA →
env-114	SRS022621_C4094963	-	158	85	RNA → hypo →
env-115	SRS023352_C4653467	-	740	667	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-116	SRS024138_C2697359	+	474	547	RNA →
env-117	SRS024277_LANL_scaffold.45644	+	325	398	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-118	SRS024580_C3091241	-	952	879	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-119	SRS047824_WUGC_scaffold.40341	-	1220	1147	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-120	SRS048411_C6958491	-	407	334	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-121	SRS048791_C3141610	+	191	264	RNA → rplM (PRK09216)RplM (COG0102) →
env-122	SRS053603_LANL_scaffold.55573	+	1162	1235	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-123	SRS058336_C2151893	+	935	1008	RNA →
env-124	SRS064423_LANL_scaffold.69482	-	3254	3181	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-125	SRS065278_C2565433	-	3238	3165	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-126	SRS016740_C2737901	-	1286	1213	RNA → hypo → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-127	SRS047210_C3305333	-	1003	930	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-128	SRS064774_C2715190	+	51	124	RNA → hypo → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-129	SRS014692_C1518495	-	385	312	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-130	SRS014684_WUGC_scaffold.43074	+	2486	2559	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-131	SRS014689_WUGC_scaffold.12190	+	2627	2700	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-132	Supragingival_plaque_LANL_scaffold.252697	-	158	85	RNA →
env-133	SRS013705_Baylor_scaffold.2470	-	1400	1327	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-134	SRS014271_C2964309	+	4142	4215	RNA →
env-135	SRS015215_WUGC_scaffold.38570	+	157	230	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-136	SRS016342_C2855557	-	402	329	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-137	SRS017808_Baylor_scaffold.55041	-	1325	1252	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-138	SRS018791_C2310859	+	489	562	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →

env-139	SRS020220_Baylor_scaffold_52325	-	173	100	RNA→		
env-140	SRS021954_Baylor_scaffold_48638	+	2555	2628	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-141	SRS023617_Baylor_scaffold_62383	+	2343	2416	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-142	SRS023926_Baylor_scaffold_35364	+	6413	6486	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-143	SRS024081_C2596496	-	158	85	RNA→		
env-144	SRS044373_C2896605	-	144	217	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-145	SRS044486_C2263445	-	551	478	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	
env-146	SRS050244_C4466451	-	293	220	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	
env-147	SRS056892_C1498053	-	740	667	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-148	SRS015797_C2641570	+	936	1009	RNA→		
env-149	SRS019219_C2933673	+	150	223	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-150	SRS024318_LANL_scaffold_22081	-	1688	1615	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-151	SRS042643_WUGC_scaffold_65245	-	159	86	RNA→		
env-152	SRS043663_LANL_scaffold_40074	-	6366	6293	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-153	SRS053854_LANL_scaffold_53869	+	18601	18674	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-154	SRS062761_LANL_scaffold_7973	+	6020	6093	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-155	SRS075404_C3410168	+	150	223	RNA→		
env-156	SRS023835_Baylor_scaffold_45883	-	172	99	RNA→		
env-157	SRS049147_LANL_scaffold_19223	-	1397	1324	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-158	SRS020856_Baylor_scaffold_43228	+	1090	1165	RNA→		
env-159	SRS023557_C1740022	+	539	614	RNA→		
env-160	SRS023930_Baylor_scaffold_1355	+	765	840	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-161	SRS013946_WUGC_scaffold_1088	+	79348	79423	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-162	SRS019124_C1404027	-	844	769	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
Psp-23-1	NC_022111.1	-	1426745	1426670	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-163	Keratinized_gingiva_LANL_scaffold_26598	-	469	394	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	
env-164	SRS045127_LANL_scaffold_9552	-	310	235	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	
env-165	SRS057539_LANL_scaffold_47289	+	1537	1612	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-166	SRS064774_LANL_scaffold_66778	-	205	130	RNA→	rplM (PRK09216)→	
env-167	SRS024375_LANL_scaffold_43091	-	2175	2100	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-168	SRS045715_LANL_scaffold_76474	+	674	749	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-169	SRS013818_Baylor_scaffold_58539	-	3474	3399	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-170	SRS018439_Baylor_scaffold_27830	+	14827	14902	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-171	Palatine_Tonsils_LANL_C6199093	-	206	131	RNA→	rplM (PRK09216)→	
env-172	SRS016740_Baylor_scaffold_45058	-	3466	3391	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-173	SRS011306_Baylor_scaffold_30322	-	1178	1103	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-174	SRS013164_Baylor_scaffold_48360	-	1235	1160	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-175	SRS013942_C1226381	+	56	131	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	
env-176	SRS013947_WUGC_scaffold_26275	+	3554	3629	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-177	SRS013948_C1540062	-	1341	1266	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-178	SRS014888_C2952726	-	278	203	RNA→	rplM (PRK09216)RplM (COG0102)→	
env-179	SRS015762_WUGC_scaffold_24890	-	155	80	RNA→		
env-180	SRS016002_WUGC_scaffold_61027	+	308	383	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-181	SRS016086_WUGC_scaffold_26845	-	1575	1500	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-182	SRS016225_C2845363	+	174	249	RNA→		
env-183	SRS016569_Baylor_scaffold_56398	-	14475	14400	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-184	SRS017808_C3912739	+	987	1062	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-185	SRS018145_Baylor_scaffold_43542	-	203	128	RNA→	rplM (PRK09216)→	
env-186	SRS019022_WUGC_scaffold_45455	+	194	269	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-187	SRS019045_C2719629	+	63	138	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-188	SRS019126_WUGC_scaffold_13188	+	379	454	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-189	SRS019894_C3913439	-	664	589	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→	rpsI (PRK00132)rps9 (CHL00079)→

env-190	SRS019974_Baylor_scaffold.2117	+	182	257	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-191	SRS021954_C3044878	+	70	145	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-192	SRS023958_C1974288	+	58	133	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-193	SRS024015_Baylor_scaffold.54415	+	4601	4676	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-194	SRS024277_C2835398	+	56	131	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-195	SRS048411_C6973885	+	102	177	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-196	SRS048791_C3265861	-	1162	1087	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-197	SRS052227_C2916121	-	1045	970	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-198	SRS053603_LANL_scaffold.51146	-	1182	1107	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-199	SRS054687_C3493368	+	1536	1611	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-200	SRS056323_C2562669	-	459	384	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-201	SRS057355_C2358048	-	1102	1027	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-202	SRS063193_LANL_scaffold.66856	-	3099	3024	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-203	SRS064423_LANL_scaffold.47969	-	3499	3424	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-204	SRS077736_LANL_scaffold.38236	+	42461	42536	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-205	Tongue_dor_WUGI_scaffold.8501	+	269	344	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-206	SRS014470_C3713445	+	547	622	RNA → rplM (PRK09216)RplM (COG0102) →
env-207	SRS018300_C3341863	+	280	205	RNA → rplM (PRK09216)RplM (COG0102) →
env-208	SRS024441_LANL_scaffold.48252	-	856	931	RNA →
env-209	SRS075404_C3567588	+	297	372	RNA → rplM (PRK09216)RplM (COG0102) →
env-210	SRS011086_WUGC_scaffold.15953	-	4147	4072	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-211	SRS013879_WUGC_scaffold.7871	+	156	231	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-212	SRS011243_Baylor_scaffold.40702	-	1370	1295	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-213	SRS014573_WUGC_scaffold.49775	-	908	833	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-214	SRS015797_WUGC_scaffold.1453	-	1656	1581	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-215	SRS016037_WUGC_scaffold.35398	+	102	177	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-216	SRS021496_Baylor_scaffold.24398	-	5055	4980	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-217	SRS024138_Baylor_scaffold.896	+	1270	1345	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-218	SRS042643_WUGC_scaffold.46473	+	11248	11323	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-219	SRS047219_C2146198	+	105	180	RNA → rplM (PRK09216)RplM (COG0102) →
env-220	SRS049147_LANL_scaffold.18610	+	946	1021	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-221	SRS055426_LANL_scaffold.19831	-	3585	3510	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → hypo →
env-222	Buccal_mucosa_LANL_scaffold.78460	-	760	685	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-223	SRS014271_WUGC_scaffold.629	+	43	118	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-224	SRS062544_LANL_scaffold.4602	-	1246	1171	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-225	SRS065278_LANL_scaffold.63970	-	3725	3650	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-226	SRS024081_LANL_scaffold.32043	+	406	481	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-227	SRS022719_LANL_scaffold.53966	+	5202	5277	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-228	SRS044662_LANL_scaffold.14148	-	15885	15810	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-229	SRS050669_LANL_scaffold.25595	+	601	676	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-230	SRS058336_LANL_scaffold.14781	-	102	27	RNA → hypo →
env-231	SRS016342_Baylor_scaffold.48981	+	82	157	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-232	SRS018739_WUGC_scaffold.60144	-	1366	1291	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-233	SRS019126_C2043960	+	254	329	RNA →
Pna-2-1	NZ_BAKD01000002.1	-	398642	398567	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pna-1-1	NZ_KB904328.1	+	132132	132207	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-234	SRS011140_Baylor_scaffold.53572	+	2158	2083	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-235	SRS015434_C5898829	+	238	313	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-236	SRS015644_WUGC_scaffold.48566	+	1536	1611	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-237	SRS019077_WUGC_scaffold.47444	-	372	297	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-238	SRS019127_C1659470	+	56	131	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-239	SRS020856_Baylor_scaffold.12760	-	1113	1038	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →

env-240	SRS022077_Baylor_scaffold_47573	+	56	131	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-241	SRS022621_Baylor_scaffold_3806	-	26534	26459	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-242	SRS023617_Baylor_scaffold_52938	-	36529	36454	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-243	SRS024580_C3074526	-	620	545	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-244	SRS042131_WUGC_scaffold_8821	+	37335	37260	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-245	SRS050244_LANL_scaffold_95985	+	1714	1789	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-246	SRS019607_C2757825	-	1575	1500	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-247	SRS023835_Baylor_scaffold_30646	-	382	307	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-248	SRS057205_LANL_scaffold_32691	+	1114	1189	RNA →		
env-249	SRS012279_C2758674	+	3094	3169	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-250	SRS014692_C1492733	+	63	138	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-251	SRS019026_C1981803	+	132	207	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-252	SRS019027_C1968276	+	63	138	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-253	SRS019327_WUGC_scaffold_24766	-	2945	2870	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-254	SRS019389_C2252888	+	2434	2509	RNA →		
env-255	SRS023352_C4687326	-	1370	1295	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-256	SRS047210_C3287465	-	670	595	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)rps9 (CHL00079) →
env-257	SRS057791_LANL_scaffold_82241	+	477	552	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-258	SRS014684_WUGC_scaffold_44011	+	3280	3355	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-259	SRS017533_Baylor_scaffold_27038	-	80	5	RNA →		
env-260	SRS043663_LANL_scaffold_17693	+	210	285	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-261	SRS062761_C4207862	-	374	299	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-262	SRS013946_WUGC_scaffold_14040	+	788	863	RNA →	rplM (PRK09216)Ribosomal_L13 (cd00392) →	
env-263	SRS019125_WUGC_scaffold_9864	-	274	199	RNA →	rplM (PRK09216)RplM (COG0102) →	
env-264	SRS013506_Baylor_scaffold_8126	-	301	226	RNA →	rplM (PRK09216)Ribosomal_L13 (cd00392) →	
env-265	SRS014473_C1126965	+	422	497	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-266	AUX0014368639.1	-	674	600	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-267	AUX0015562770.1	+	235	303	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Bsp-2-1	NZ_JNXX01000045.1	-	3997	3929	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Bsp-1-1	NZ_JNLA01000048.1	+	27849	27917	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-268	SRS023352_C4496944	-	123	46	RNA →	hypo →	
env-269	SRS062544_C2920745	+	463	540	RNA →		
env-270	SRS019219_WUGC_scaffold_426	-	214	137	RNA →	hypo →	
env-271	SRS051791_LANL_scaffold_54765	-	217	140	RNA →		
env-272	SRS015057_WUGC_scaffold_61382	+	542	619	RNA →		
env-273	SRS048411_C6924690	+	505	582	RNA →		
env-274	SRS057791_C3531782	+	268	345	RNA →		
env-275	SRS045715_LANL_scaffold_76924	+	360	437	RNA →		
env-276	SRS015272_C3500034	-	214	137	RNA →		
env-277	SRS018791_C2278485	+	773	850	RNA →		
env-278	SRS011255_C2362793	-	117	40	RNA →		
env-279	SRS013950_WUGC_scaffold_2138	-	220	143	RNA →		
env-280	SRS013836_C4630228	+	244	321	RNA →		
env-281	SRS023841_C1489733	-	221	144	RNA →	hypo →	
env-282	Supragingival_plaque_LANL_scaffold_194841	-	474	397	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-283	SRS017691_C5410429	+	2077	2154	RNA →		
env-284	SRS024561_C2727733	+	380	457	RNA →		
env-285	SRS024277_C2727216	-	173	96	RNA →	hypo →	
env-286	SRS016319_C3957492	-	123	46	RNA →	hypo →	
env-287	SRS042131_C2217398	+	340	417	RNA →		
env-288	SRS043663_C4080713	+	808	885	RNA →		
env-289	SRS062761_C4201374	+	277	354	RNA →		

env-290	SRS015797_C2619071	-	219	142	RNA→	
env-291	SRS019607_C2703769	-	184	107	RNA→	←-hypo
env-292	SRS021496_Baylor_scaffold_55246	+	49	126	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→
env-293	SRS024081_C2601354	+	658	735	RNA→	
env-294	SRS049389_C4506064	+	176	253	RNA→	
env-295	SRS075404_C3622013	+	648	725	RNA→	
env-296	SRS018739_C3603893	+	489	566	RNA→	
env-297	SRS020220_C3576851	-	115	38	RNA→	hypo→
env-298	SRS011306_C3387646	+	94	171	RNA→	
env-299	SRS019071_C5065527	-	138	61	RNA→	hypo→
env-300	SRS019327_WUGC_scaffold_20822	+	376	453	RNA→	
env-301	Supragingival_plaque_LANL_C182575899	-	117	40	RNA→	hypo→
env-302	SRS016002_C2496321	-	179	102	RNA→	hypo→
env-303	SRS019126_C2138744	+	361	438	RNA→	
env-304	SRS019127_C1661984	+	1415	1492	RNA→	
env-305	SRS017209_Baylor_scaffold_64433	-	214	137	RNA→	
env-306	SRS024318_LANL_scaffold_131	-	214	137	RNA→	
env-307	SRS057205_LANL_scaffold_46232	-	410	333	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→
env-308	SRS018357_C3783001	-	179	102	RNA→	hypo→
env-309	SRS020856_C2544654	+	239	316	RNA→	
env-310	SRS044373_WUGC_scaffold_63614	-	123	46	RNA→	
env-311	SRS014271_C2955858	+	2330	2407	RNA→	
env-312	SRS050244_C4442009	+	418	495	RNA→	
env-313	SRS062544_C3030084	+	2332	2409	RNA→	
env-314	SRS013164_C2312325	-	119	42	RNA→	hypo→
env-315	SRS016225_C2929058	+	310	388	RNA→	
env-316	4491686.3.521687	+	140	220	RNA→	←-hypo
env-317	scaffold7222.1_MH0052	-	220	140	RNA→	
env-318	4491686.3.475604	-	103	23	RNA→	←-hypo
env-319	2013397958	-	676	600	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rplM (PRK09216)Ribosomal_L13 (pfam00572)→
Psp-3-1	NZ_AUJK01000003.1	+	63931	64008	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-320	scaffold26454.4_MH0084	+	5212	5288	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-321	scaffold66021.2_MH0081	+	3270	3346	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-322	scaffold25402.2_MH0054	+	2416	2492	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-323	scaffold8724.1_O2_UC-16	-	106	30	RNA→	
env-324	SRS015782_WUGC_scaffold_20008	-	24364	24288	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-325	SRS047044_WUGC_scaffold_15995	-	1654	1578	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-326	scaffold34413.1_V1_CD-13	+	111	187	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-327	scaffold69522.1_MH0044	+	6237	6313	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-328	scaffold59624.1_MH0052	+	3663	3739	RNA→	←-hypo
env-329	scaffold15726.3_MH0032	-	12257	12181	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-330	scaffold58986.1_MH0033	-	3162	3086	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-331	scaffold11675.1_MH0026	+	12207	12283	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-332	NLM025_scaffold6375_35	-	965	889	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-333	SRS013951_WUGC_scaffold_10163	-	35684	35608	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-334	SRS019161_WUGC_scaffold_63747	+	921	997	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-335	SRS050422_LANL_scaffold_39679	-	16737	16661	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-336	scaffold3922.2_MH0001	-	532	456	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→
env-337	scaffold12670.1_MH0041	+	6023	6099	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-338	4491401.3_NODE_59631	+	440	516	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→
env-339	scaffold24499.3_MH0018	-	199	123	RNA→	
env-340	SRS048164_WUGC_scaffold_7139	-	11028	10952	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→

env-341	scaffold13081_6.MH0009	-	3032	2956	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-342	scaffold29722_3.MH0034	+	2377	2453	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-343	scaffold19923_2.O2.UC-12	-	430	354	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-344	SRS015794_Baylor_scaffold.29113	-	896	820	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-345	scaffold988_4.MH0046	-	10774	10698	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-346	scaffold60646_3.MH0076	-	3034	2958	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-347	scaffold60041_3.MH0056	-	523	447	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-348	scaffold62900_7.O2.UC-19	+	1505	1581	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-349	Subgingival_plaque.LANL.C11191810	+	401	479	RNA →		
Pma-3-1	NZ_JH594503.1	-	275251	275173	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-350	SRS024087_C3572528	-	219	141	RNA →		
env-351	SRS024289_LANL_scaffold.69854	-	837	759	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-352	SRS047634_LANL_scaffold.34142	-	1677	1599	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pma-1-1	NZ_KB908319.1	+	316856	316934	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pma-2-1	NZ_BAJZ01000003.1	+	9704	9782	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-353	SRS018443_Baylor_scaffold.42450	+	2749	2827	RNA →		
env-354	SRS019980_C3029122	+	888	966	RNA →		
env-355	SRS017227_Baylor_scaffold.86068	-	121	43	RNA →		
env-356	SRS049268_LANL_scaffold.27761	+	405	483	RNA →		
env-357	SRS017120_Baylor_scaffold.16174	+	172	250	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-358	SRS024318_LANL_scaffold.13466	-	227	149	RNA →	hypo →	
env-359	SRS018791_WUGC_scaffold.24827	+	398	476	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-360	SRS075404_C3518551	+	334	412	RNA →		
env-361	SRS015395_C2316301	+	133	211	RNA →		
env-362	SRS019122_C5835162	+	454	532	RNA →		
env-363	SRS011086_WUGC_scaffold.41294	+	17651	17729	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-364	SRS020334_Baylor_scaffold.26466	-	656	578	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-365	SRS023617_Baylor_scaffold.72410	+	1232	1310	RNA →		
env-366	SRS047210_C3259279	-	125	47	RNA →		
env-367	SRS050244_LANL_scaffold.47339	-	253	175	RNA →		
env-368	SRS014689_C1337541	-	253	175	RNA →		
env-369	SRS016225_C2877068	+	184	262	RNA →		
env-370	SRS018591_WUGC_scaffold.20233	+	10037	10115	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-371	SRS013705_C3658225	+	116	194	RNA →		
env-372	SRS019607_WUGC_scaffold.9276	+	440	362	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-373	SRS014684_C3202863	-	288	366	RNA →		
env-374	SRS047824_WUGC_scaffold.43430	+	1021	1099	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-375	SRS014573_WUGC_scaffold.51555	-	550	472	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-376	SRS015209_WUGC_scaffold.7145	-	1222	1144	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-377	SRS021496_Baylor_scaffold.21245	+	106	184	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-378	SRS023835_Baylor_scaffold.21120	+	440	362	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-379	SRS047219_WUGC_scaffold.3870	-	3309	3387	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-380	SRS048791_LANL_scaffold.13616	+	156	234	RNA →		
env-381	SRS051791_LANL_scaffold.6037	+	5220	5298	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-382	SRS062544_LANL_scaffold.33552	+	2985	3063	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-383	SRS063193_LANL_scaffold.17717	-	550	472	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-384	SRS023926_Baylor_scaffold.61302	-	446	368	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-385	SRS019126_C2050939	+	106	184	RNA →		
env-386	SRS014692_C1429530	+	228	306	RNA →		
env-387	SRS023352_LANL_scaffold.12203	+	574	652	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-388	SRS053603_LANL_scaffold.56678	-	125	47	RNA →	hypo →	
env-389	SRS075404_LANL_scaffold.32190	+	334	412	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	

env-390	SRS019026_C1988327	+	1161	1239	RNA→
env-391	SRS042131_WUGC_scaffold_38955	-	396	318	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-392	SRS015038_WUGC_scaffold_15341	-	253	175	RNA→
env-393	SRS016002_WUGC_scaffold_10716	+	1413	1491	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-394	SRS056323_C2617078	-	253	175	RNA→
env-395	SRS065278_C2566571	-	253	175	RNA→
env-396	SRS019974_C3363040	+	862	940	RNA→
Psa-2-1	NZ_GL629647.1	+	2253698	2253776	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-397	SRS016086_C2389321	-	101	23	RNA→ hypo→
env-398	SRS020856_Baylor_scaffold_13408	+	234	312	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-399	SRS014271_WUGC_scaffold_18759	+	466	544	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-400	SRS015057_WUGC_scaffold_34905	+	1097	1175	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
Psa-3-1	NZ_AWG01000017.1	+	92405	92483	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-401	SRS012279_C2722110	+	914	992	RNA→
env-402	SRS024015_Baylor_scaffold_12438	+	2443	2521	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-403	SRS013234_C2993348	-	253	175	RNA→
env-404	SRS024081_LANL_scaffold_75049	+	9042	9120	RNA→
env-405	SRS057205_C3268011	+	63	141	RNA→
env-406	Tongue_dor_WUGI_scaffold_48438	-	373	295	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-407	SRS022143_WUGC_scaffold_32861	+	47	125	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-408	SRS016541_Baylor_scaffold_9219	-	350	274	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-409	SRS016575_C3620180	+	304	380	RNA→
env-410	SRS017691_Baylor_scaffold_1218	-	223	147	RNA→
env-411	SRS049318_C6476930	+	709	785	RNA→
env-412	SRS016569_Baylor_scaffold_25639	-	252	175	RNA→
Por-6-1	NZ_BA_JC01000029.1	+	9652	9728	RNA→ hypo→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
Por-5-1	NZ_KB898581.1	-	166045	165968	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-413	SRS013723_C3447116	-	123	46	RNA→
env-414	SRS013170_Baylor_scaffold_49654	-	224	147	RNA→ hypo→
env-415	SRS015055_C1639257	-	224	147	RNA→ hypo→
env-416	SRS015062_C160810	-	234	157	RNA→ hypo→
env-417	SRS023964_C2594004	-	224	147	RNA→
Por-4-1	NZ_GL349571.1	+	7135	7212	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
Por-7-1	NZ_GG703883.1	+	239161	239238	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-418	Buccal_mucosa_LANL_C65077335	+	342	419	RNA→ hypo→
env-419	SRS019980_C3064054	-	118	41	RNA→ hypo→
env-420	SRS019029_C3217778	+	42	119	RNA→ hypo→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-421	SRS024087_C3239609	+	108	185	RNA→
env-422	SRS014476_C3433381	+	868	945	RNA→
env-423	Subgingival_plaque_LANL_C11098963	-	118	41	RNA→ hypo→
env-424	SRS024649_LANL_scaffold_18754	+	580	657	RNA→
Psp-8-1	NZ_AZHT01000177.1	+	6805	6883	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-425	SRS019219_WUGC_scaffold_64631	-	18808	18730	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-426	SRS014271_C2786805	-	121	43	RNA→ hypo→
env-427	SRS024318_LANL_scaffold_76469	+	3580	3658	RNA→
env-428	SRS062544_C2827308	-	121	43	RNA→ hypo→
env-429	SRS017120_Baylor_scaffold_66317	-	655	577	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-430	SRS042643_WUGC_scaffold_1740	-	1427	1349	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-431	SRS018739_WUGC_scaffold_55643	+	229	307	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-432	SRS050244_LANL_scaffold_95751	+	228	306	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-433	SRS019026_C1859658	+	229	307	RNA→

env-434	SRS044373_C2740995	-	121	43	RNA	→	hypo	→
env-435	SRS021496_Baylor_scaffold.66287	+	228	306	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-436	SRS023352_LANL_scaffold.79269	-	463	385	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-437	SRS022143_WUGC_scaffold.73957	+	77	155	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-438	SRS015893_C2357989	-	655	577	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-439	SRS015057_WUGC_scaffold.71704	+	230	308	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-440	SRS024355_LANL_scaffold.106705	-	2853	2775	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-441	SRS058053_C5276896	-	119	41	RNA	→		
env-442	SRS023595_C6791388	-	141	63	RNA	→	hypo	→
env-443	SRS047219_C2204013	+	361	439	RNA	→		
Pou-1-1	NZ_JH114217.1	+	161819	161897	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-444	SRS019980_C2940732	+	377	455	RNA	→		
env-445	SRS022536_LANL_scaffold.97402	-	1401	1323	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-446	SRS018591_C1244473	-	270	192	RNA	→	rplM (PRK09216) →	
env-447	SRS063999_LANL_scaffold.89325	+	324	402	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
Pou-2-1	NZ_BAJQ01000079.1	-	3607	3529	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-448	AUXO010375897.1	+	341	415	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-449	SRS063603_C4098342	+	290	366	RNA	→		
Pba-2-1	NZ_AWEY01000020.1	-	92342	92266	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
Pba-1-1	NZ_AUFQ01000002.1	-	90788	90712	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
Pba-1-2	NZ_BAJF01000002.1	+	155272	155348	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-450	SRS049389_C4455900	+	102	178	RNA	→		
Pde-2-1	NZ_BAKG01000016.1	+	37012	37087	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
Pbe-1-1	NZ_GG704782.1	+	371273	371346	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-451	AUXO016035411.1	-	430	357	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-452	AUXO017177372.1	+	741	814	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-453	AUXO011185619.1	+	157	231	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-454	SRS022725_LANL_scaffold.110518	-	1243	1167	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-455	SRS047634_LANL_scaffold.138961	-	948	872	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-456	SRS063603_LANL_scaffold.20726	+	2347	2423	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-457	SRS058808_LANL_scaffold.70845	-	2078	2005	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-458	SRS022602_Baylor_scaffold.3137	+	97	171	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-459	SRS013252_Baylor_scaffold.54444	-	7007	6933	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-460	SRS017511_C3369784	-	87	13	RNA	→	hypo	→
env-461	SRS063603_LANL_scaffold.102327	+	763	837	RNA	→		
Psa-1-1	NZ_KB290984.1	-	62870	62796	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-462	SRS049268_C4307889	-	590	516	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-463	SRS017227_C5254572	-	533	459	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-464	SRS018665_C3785311	+	95	169	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-465	SRS051941_C3920117	-	311	237	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-466	HCF12C.28379	-	230	155	RNA	→	hypo	→
env-467	08.07_GOS_DNA_C8001741.1	+	143	218	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-468	AUXO013741021.1	+	250	324	RNA	→	hypo	→
env-469	AUXO016321942.1	+	109	183	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-470	AUXO016352636.1	+	21	94	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
Ppa-3-1	NZ_BAJH01000014.1	+	85099	85176	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
Ppa-2-1	NZ_KB890632.1	+	85379	85456	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-471	2205195008	+	38	115	RNA	→		
env-472	2157459302	+	38	115	RNA	→		
env-473	JGI20225J20221_1004075	+	804	881	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-474	BMHB3a_c149604	-	2595	2518	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→
env-475	JGI20225J20221_1000003	-	388531	388454	RNA	→	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380)	→

env-476	BMHBC.68715	+	149	226	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-477	BMHBC.2.1802482	+	57	134	RNA →	
env-478	BMHBC.2.3001399	+	57	134	RNA →	
env-479	BMHBC.2.2370598	+	57	134	RNA →	
env-480	BMHBC.2.1178038	+	57	134	RNA →	
env-481	BMHBC.2.612469	+	57	134	RNA →	
env-482	BMHBC.2.3578336	+	57	134	RNA →	
env-483	HCE12Call500_c0056283	+	177	251	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-484	HCF12C.221933	-	28484	28410	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-485	HCF14C.11080	-	2194	2120	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-486	AUXO012434654.1	+	366	290	RNA →	rplM (PRK09216)RplM (COG0102)Ribosomal_L13 (cd00392) →
env-487	AUXO011866134.1	+	7	83	RNA →	← hypo
env-488	AUXO017757733.1	-	1325	1250	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-489	AUXO011774349.1	-	771	700	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-490	SRS013542_LANL_scaffold_1766	-	69128	69055	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-491	SRS023604_Baylor_scaffold_50	+	320	393	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-492	SRS017497_Baylor_scaffold_193	+	91994	91921	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-493	SRS023468_LANL_scaffold_8569	-	176	249	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pam-1-1	NZ_ADFQ01000027.1	+	26891	26964	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pam-2-1	NZ_JRNU01000014.1	-	45509	45436	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pam-3-1	NZ_KB905270.1	+	27167	27240	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pam-4-1	NZ_BAJP01000004.1	-	90359	90286	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbi-1-1	NZ_JUWN01000307.1	+	2136	2209	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbi-6-1	NZ_ADFO01000036.1	-	4358	4285	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbi-5-1	NZ_JH660660.1	+	893597	893670	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbi-2-1	NZ_JRNF01000004.1	+	30225	30298	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbi-4-1	NZ_JRNM01000029.1	+	14173	14246	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbi-3-1	NZ_JRNQ01000001.1	-	38223	38150	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pve-1-1	NZ_KB898330.1	+	50120	50193	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pve-2-1	NZ_BAIP01000005.1	+	49830	49903	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pve-3-1	NZ_GG698713.1	-	155542	155469	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-494	SRS013836_C4770317	-	112	39	RNA →	hypo →
env-495	SRS014689_WUGC_scaffold_10524	-	158	84	RNA →	hypo →
env-496	SRS019045_WUGC_scaffold_55373	+	7079	7153	RNA →	
env-497	SRS064329_LANL_scaffold_12626	+	135	209	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
Psc-1-1	NZ_BAKP01000004.1	+	58256	58330	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-498	SRS017808_Baylor_scaffold_59118	+	835	909	RNA →	
env-499	SRS044373_WUGC_scaffold_55808	+	931	1005	RNA →	
env-500	SRS053603_LANL_scaffold_86116	+	1113	1187	RNA →	
Psp-6-1	NZ_KI259601.1	+	30175	30249	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pme-3-1	NZ_JRNS01000294.1	+	180	255	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-501	SRS024318_LANL_scaffold_11533	-	620	547	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-502	SRS017439_Baylor_scaffold_50412	-	108	36	RNA →	
env-503	SRS011086_WUGC_scaffold_40282	-	108	36	RNA →	hypo →
env-504	SRS014124_WUGC_scaffold_14407	-	802	730	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-505	SRS017533_Baylor_scaffold_7923	+	285	357	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-506	SRS049147_LANL_scaffold_62005	+	1217	1289	RNA →	
Phi-1-1	NZ_JH376764.1	+	326001	326073	RNA →	hypo → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-507	SRS017076_C2635852	+	287	359	RNA →	hypo →
Phi-2-1	NZ_BA_JX01000005.1	-	144658	144586	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →

env-508	SRS013234_Baylor_scaffold_28796	-	148	76	RNA→
env-509	SRS024637_LANL_scaffold_306	+	443	515	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
Phi-2-2	NZ_JRNJ01000036.1	-	45722	45650	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-510	SRS014573_WUGC_scaffold_34708	-	1134	1060	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-511	SRS021496_Baylor_scaffold_22917	+	96	170	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-512	SRS015644_WUGC_scaffold_31522	-	876	802	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-513	SRS042131_C2183549	+	266	340	RNA→
env-514	SRS022719_LANL_scaffold_14486	+	176535	176609	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-515	SRS044662_LANL_scaffold_9271	+	199524	199598	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-516	SRS013879_C2814589	-	110	36	RNA→
env-517	SRS018145_Baylor_scaffold_16176	-	11602	11528	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-518	SRS057692_LANL_scaffold_51493	+	229	303	RNA→
env-519	SRS016002_WUGC_scaffold_30040	+	6147	6221	RNA→
Psp-5-1	NZ_JH114141.1	+	226443	226517	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-520	SRS017713_Baylor_scaffold_12488	-	158	84	RNA→ hypo→
env-521	SRS056622_LANL_scaffold_17923	-	158	84	RNA→ hypo→
env-522	SRS022625_Baylor_scaffold_4609	-	158	84	RNA→ hypo→
env-523	SRS016037_WUGC_scaffold_34392	+	1842	1916	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-524	SRS054687_LANL_scaffold_40466	-	149	75	RNA→ hypo→
env-525	SRS016569_Baylor_scaffold_12365	+	198	272	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-526	SRS043663_LANL_scaffold_8456	+	196	270	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-527	SRS011086_WUGC_scaffold_9083	-	2222	2148	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-528	SRS024441_LANL_scaffold_8252	-	965	891	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-529	SRS045127_LANL_scaffold_25864	+	4	78	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-530	SRS052227_C2913848	-	999	925	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
Psp-10-1	NZ_JACD01000007.1	+	195948	196022	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-531	SRS018591_WUGC_scaffold_24424	+	1589	1663	RNA→
env-532	SRS013947_C1601091	-	178	104	RNA→ hypo→
env-533	SRS019120_C1333688	+	439	513	RNA→
env-534	SRS017209_Baylor_scaffold_33086	+	1225	1299	RNA→
env-535	SRS018394_C4052969	+	130	204	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-536	SRS055378_LANL_scaffold_77236	-	397	323	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-537	SRS013164_Baylor_scaffold_24536	-	1111	1037	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-538	SRS011243_Baylor_scaffold_14041	+	7051	7125	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-539	SRS011247_C1360241	+	440	514	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→
env-540	SRS013502_Baylor_scaffold_7651	-	3320	3246	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-541	SRS013879_WUGC_scaffold_9024	-	172	98	RNA→
env-542	SRS014124_WUGC_scaffold_11710	-	948	874	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-543	SRS014689_WUGC_scaffold_10523	-	158	84	RNA→
env-544	SRS016501_C1543222	+	266	340	RNA→ rplM (PRK09216) RplM (COG0102) →
env-545	SRS019022_WUGC_scaffold_10171	-	190	116	RNA→
env-546	SRS019045_WUGC_scaffold_18044	+	6417	6491	RNA→
env-547	SRS023557_Baylor_scaffold_343	-	20477	20403	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-548	SRS024580_LANL_scaffold_5027	+	1876	1950	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-549	SRS057355_LANL_scaffold_16577	-	735	661	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-550	SRS063288_LANL_scaffold_61854	+	267	341	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-551	SRS077736_LANL_scaffold_11170	-	5468	5394	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
Pme-2-1	NZ_GG740010.1	+	211066	211140	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
Pme-1-1	NC_014370.1	-	173052	172978	RNA→ rplM (PRK09216) Ribosomal_L13 (pfam00572)→ rpsI (PRK00132) Ribosomal_S9 (pfam00380)→
env-552	SRS024447_LANL_scaffold_5458	-	189	115	RNA→ hypo→

env-553	SRS018739_WUGC_scaffold_1229	-	110	36	RNA → hypo →
env-554	SRS021954_Baylor_scaffold_773	+	402	476	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-555	SRS020858_C742461	+	146	220	RNA →
env-556	SRS055426_LANL_scaffold_45579	-	373	299	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-557	SRS013818_Baylor_scaffold_15170	+	1030	1104	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-558	SRS022530_LANL_scaffold_8517	-	2577	2503	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-559	SRS018969_WUGC_scaffold_48352	-	1834	1760	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-560	SRS019029_C3094948	+	207	281	RNA →
env-561	SRS057539_LANL_scaffold_11258	+	1634	1708	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
Pfu-1-1	NZ_CP012074.1	-	335584	335511	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Psp-24-1	NZ_AJIN01000058.1	+	75456	75530	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-562	SRS018357_Baylor_scaffold_53049	+	659	733	RNA →
env-563	SRS044486_WUGC_scaffold_29347	+	207	281	RNA →
env-564	SRS042643_WUGC_scaffold_65829	+	2043	2117	RNA →
Pde-3-1	NZ_AEXO01000095.1	+	287046	287120	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-565	SRS017691_C5408377	+	1907	1981	RNA →
Pde-4-1	NZ_JRNO01000001.1	-	3358	3284	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pde-5-1	NZ_ATWK01000001.1	+	151366	151440	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pde-5-2	NZ_BAJG01000001.1	+	303181	303255	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-566	SRS013836_Baylor_scaffold_11239	+	579	653	RNA →
env-567	SRS011255_Baylor_scaffold_46592	+	1416	1490	RNA →
Pde-6-1	NC_015311.1	+	832827	832901	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-568	SRS013836_C4811161	-	112	38	RNA →
env-569	SRS019029_WUGC_scaffold_26302	+	226	300	RNA →
Pmu-1-1	NZ_GL872283.1	+	37707	37781	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-570	AUXO010614209.1	+	217	289	RNA →
env-571	Supragingival_plaque_LANL_C181911197	-	124	49	RNA → hypo →
env-572	SRS018739_C3456198	-	221	146	RNA → hypo →
env-573	Supragingival_plaque_LANL_C182733701	+	533	608	RNA →
env-574	MA40A_contig28992	-	33539	33466	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-575	SRS023604_C759437	+	77	149	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-576	SRS023468_LANL_scaffold_9905	+	61199	61271	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Psp-22-1	NZ_JRNC01000011.1	+	61278	61350	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-577	RUMENNODE_143372.1	-	3480	3407	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-578	SRS049318_LANL_scaffold_15105	-	3354	3278	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-579	SRS017691_C5027809	-	118	42	RNA → hypo →
Pmi-3-1	NZ_JH594521.1	-	42001	41925	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pmi-1-1	NZ_KB892256.1	-	41862	41786	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pmi-2-1	NZ_BAKH01000001.1	+	67606	67682	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-580	SRS047634_LANL_scaffold_139898	+	902	978	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-581	SRS055378_C3881430	-	175	99	RNA → hypo →
env-582	SRS022602_Baylor_scaffold_67890	-	3320	3244	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pin-1-1	NC_017861.1	-	192856	192781	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-583	SRS014692_WUGC_scaffold_15999	+	4242	4316	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-584	SRS014684_WUGC_scaffold_44181	+	3215	3289	RNA →
env-585	SRS014689_WUGC_scaffold_31060	+	16578	16652	RNA →
env-586	SRS019026_WUGC_scaffold_25915	-	1526	1452	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-587	SRS019027_C1975919	+	1325	1399	RNA →
env-588	SRS022530_LANL_scaffold_21668	-	23768	23694	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-589	SRS043663_C4103193	+	3216	3290	RNA →
env-590	SRS044373_WUGC_scaffold_63271	+	16814	16888	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →

env-591	SRS048791.LANL_scaffold_39630	-	1512	1438	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-592	SRS047824.WUGC_scaffold_53533	-	614	540	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-593	SRS057205.LANL_scaffold_58665	+	670	744	RNA →	rplM (PRK09216)RplM (COG0102) →	
env-594	SRS012279.Baylor_scaffold_56590	-	3134	3060	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-595	SRS011306.Baylor_scaffold_89003	-	10148	10074	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-596	SRS075404.LANL_scaffold_64891	+	238	312	RNA →		
env-597	SRS023352.LANL_scaffold_62464	-	47439	47365	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-598	SRS063603.C4102126	+	332	406	RNA →		
env-599	SRS064329.C2725335	+	3215	3289	RNA →		
env-600	SRS062878.LANL_scaffold_70775	-	8062	7988	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-601	Subgingival_plaque.LANL_C11028051	+	219	293	RNA →		
env-602	SRS014691.C2755366	+	2883	2957	RNA →		
env-603	SRS015272.C3490354	+	339	413	RNA →		
env-604	SRS015644.WUGC_scaffold_48472	+	933	1007	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-605	SRS018357.Baylor_scaffold_17708	-	24023	23949	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-606	SRS019974.Baylor_scaffold_54950	+	3215	3289	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-607	SRS023617.Baylor_scaffold_30918	+	5850	5924	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-608	SRS024375.C2325854	+	138	212	RNA →		
env-609	SRS042131.WUGC_scaffold_50435	+	3411	3485	RNA →		
env-610	SRS047210.WUGC_scaffold_57327	+	9864	9938	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-611	SRS050244.LANL_scaffold_37949	-	1334	1260	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-612	SRS053603.LANL_scaffold_49200	+	16206	16280	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-613	SRS017076.C2680416	+	454	528	RNA →		
env-614	SRS013946.C747973	-	1186	1112	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-615	SRS014470.WUGC_scaffold_48816	-	9526	9452	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-616	SRS014573.C3755401	+	2926	3000	RNA →		
env-617	SRS015038.WUGC_scaffold_38040	+	3215	3289	RNA →		
env-618	SRS015057.WUGC_scaffold_8828	+	2155	2229	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-619	SRS015209.WUGC_scaffold_49105	+	45106	45180	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-620	SRS015893.WUGC_scaffold_32763	+	3119	3193	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-621	SRS016002.WUGC_scaffold_17242	+	35903	35977	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-622	SRS017120.Baylor_scaffold_72849	+	96	170	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-623	SRS017439.Baylor_scaffold_52553	-	1177	1103	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-624	SRS018300.Baylor_scaffold_51866	+	3216	3290	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-625	SRS018439.Baylor_scaffold_51883	-	3196	3122	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-626	SRS018739.WUGC_scaffold_60459	-	1177	1103	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-627	SRS019126.WUGC_scaffold_41627	-	1177	1103	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-628	SRS019127.C1673699	+	3216	3290	RNA →		
env-629	SRS019219.WUGC_scaffold_22098	-	3099	3025	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-630	SRS020220.Baylor_scaffold_52465	-	1526	1452	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-631	SRS020856.Baylor_scaffold_35690	-	3199	3125	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-632	SRS022143.WUGC_scaffold_32909	-	9534	9460	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-633	SRS022621.C4119557	+	2940	3014	RNA →		
env-634	SRS024318.LANL_scaffold_74074	-	11441	11367	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-635	SRS024580.C3038766	-	171	97	RNA →		
env-636	SRS024637.LANL_scaffold_30251	+	233	307	RNA →		
env-637	SRS042910.C5625461	+	3216	3290	RNA →		
env-638	SRS045715.LANL_scaffold_89135	+	3431	3505	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-639	SRS049147.LANL_scaffold_58601	+	95	169	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-640	SRS053854.C1915023	+	140	214	RNA →		
env-641	SRS054687.C3415499	-	171	97	RNA →	hypo →	
env-642	SRS055426.LANL_scaffold_56878	+	12351	12425	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	

env-643	SRS056622.LANL_scaffold_38514	-	47437	47363	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-644	SRS058336_C2178143	+	3215	3289	RNA →	
env-645	SRS063193.LANL_scaffold_53070	+	2926	3000	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-646	SRS064423.LANL_scaffold_66525	-	11227	11153	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-647	SRS065278_C2564619	+	3215	3289	RNA →	
Ppa-1-1	NZ_GL982513.1	+	723490	723564	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-648	SRS018791.WUGC_scaffold_38475	-	1334	1260	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-649	SRS022077_Baylor_scaffold_52460	-	1526	1452	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-650	SRS024015_Baylor_scaffold_54468	-	5401	5327	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-651	SRS016319.WUGC_scaffold_54116	+	3215	3289	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-652	SRS047219.WUGC_scaffold_57943	+	16790	16864	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-653	Buccal_mucosa.LANL_C64807355	-	110	36	RNA →	hypo →
env-654	Contig7238817.1	-	110	36	RNA →	
env-655	SRS015434_C5938921	-	110	36	RNA →	
env-656	SRS017808_Baylor_scaffold_37180	+	3883	3957	RNA →	
env-657	SRS016740_C2751815	-	117	43	RNA →	
env-658	SRS023930_C2173199	-	90	16	RNA →	
env-659	SRS013705_Baylor_scaffold_102904	+	23297	23371	RNA →	
env-660	SRS013879_C2856030	+	1392	1466	RNA →	
env-661	SRS015762.WUGC_scaffold_41259	+	774	848	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-662	SRS015797.WUGC_scaffold_34883	-	23901	23827	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-663	SRS015941.WUGC_scaffold_78227	+	3216	3290	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-664	SRS016086.WUGC_scaffold_26855	-	171	97	RNA →	
env-665	SRS016225_C2803421	-	171	97	RNA →	hypo →
env-666	SRS016569_Baylor_scaffold_56485	+	16533	16607	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-667	SRS021496_Baylor_scaffold_85386	-	12316	12242	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-668	SRS021954_C2960878	+	284	358	RNA →	
env-669	SRS023926_C2818602	+	2890	2964	RNA →	
env-670	SRS024081.LANL_scaffold_39378	+	40034	40108	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-671	SRS042643.WUGC_scaffold_26426	-	1334	1260	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-672	SRS051791.LANL_scaffold_12138	-	47738	47664	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-673	SRS057539.LANL_scaffold_35057	+	49731	49805	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-674	SRS063288_C2542184	+	84	158	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-675	SRS064774.LANL_scaffold_17002	-	16294	16220	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-676	UnmappedStool_Broad_C252508257	-	155	79	RNA →	hypo →
Pco-3-1	NZ_AUME01000007.1	-	36087	36011	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pco-3-2	NZ_BAIT01000003.1	+	74722	74798	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pni-1-1	NZ_GL982464.1	+	2020144	2020219	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-677	SRS012285_Baylor_scaffold_36585	+	18214	18289	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-678	SRS022083_C1814115	-	190	115	RNA →	hypo →
env-679	SRS024144_C1709965	-	224	149	RNA →	rplM (PRK09216)RplM (COG0102)Ribosomal_L13 (cd00392)Ribosomal_L13 (pfam00572) →
env-680	SRS063932.LANL_scaffold_105725	+	15855	15930	RNA →	
env-681	Subgingival_plaque.LANL_C10982129	-	147	72	RNA →	hypo →
env-682	SRS022725.LANL_scaffold_18998	-	20108	20033	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-683	SRS063215_C2206217	+	314	389	RNA →	hypo →
env-684	SRS045313.LANL_scaffold_12927	+	11427	11502	RNA →	
env-685	SRS058053.LANL_scaffold_46648	+	2496	2571	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-686	SRS015215.WUGC_scaffold_60845	+	31443	31518	RNA →	
env-687	SRS016575_C3771021	-	171	96	RNA →	hypo →
env-688	SRS017227_Baylor_scaffold_128981	-	4583	4508	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-689	SRS018573_C2468474	-	171	96	RNA →	hypo →

env-690	SRS045197_C3607732	+	2688	2763	RNA→	
env-691	SRS047113_C5438044	+	4885	4960	RNA→	
env-692	SRS049318_LANL_scaffold_180129	+	334	409	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→
env-693	SRS051930_C3291029	+	3901	3976	RNA→	
env-694	SRS057022_LANL_scaffold_21753	+	985	1060	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→
env-695	SRS064449_C4104329	+	731	806	RNA→	
env-696	SRS014691_C2755332	-	159	84	RNA→	hypo→
env-697	SRS019029_WUGC_scaffold_30607	-	318	243	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→
env-698	SRS011255_Baylor_scaffold_75811	-	105	30	RNA→	
env-699	SRS023938_C2346941	-	137	62	RNA→	
Pni-3-1	NZ_ADGJ01000034.1	+	4034	4109	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-700	SRS013533_PGA_scaffold_55845	+	31911	31986	RNA→	←hypo
env-701	SRS013950_WUGC_scaffold_19463	+	6777	6852	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-702	SRS015574_C3429056	+	765	840	RNA→	
env-703	SRS019980_Baylor_scaffold_52314	-	426	351	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→
env-704	SRS022536_LANL_scaffold_126332	+	32859	32934	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-705	SRS023595_C7191239	-	113	38	RNA→	
env-706	SRS024087_LANL_scaffold_6797	-	49193	49118	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-707	SRS058808_C2875695	-	162	87	RNA→	
env-708	SRS065099_LANL_scaffold_67594	-	171	96	RNA→	hypo→
Pni-2-1	NZ_KI669452.1	-	66638	66563	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-709	SRS057355_C2357028	+	1923	1998	RNA→	
env-710	SRS014573_C3689837	+	580	655	RNA→	
env-711	SRS013164_Baylor_scaffold_6044	+	24960	25035	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-712	SRS015434_C5939871	+	1383	1458	RNA→	hypo→
env-713	SRS016037_WUGC_scaffold_40495	-	1517	1442	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-714	SRS017209_C2612132	-	171	96	RNA→	hypo→
env-715	SRS018145_Baylor_scaffold_45351	+	15741	15816	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-716	SRS019071_WUGC_scaffold_1653	-	393	318	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→
env-717	SRS019327_WUGC_scaffold_7031	-	9945	9870	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-718	SRS022719_LANL_scaffold_29884	-	15205	15130	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-719	SRS023958_Baylor_scaffold_35671	+	24960	25035	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-720	SRS044662_LANL_scaffold_26917	-	15127	15052	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-721	SRS049389_C4741864	+	3211	3286	RNA→	hypo→
env-722	SRS050669_C2732573	-	171	96	RNA→	hypo→
env-723	SRS057692_LANL_scaffold_59063	+	15741	15816	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-724	SRS043422_C2606710	-	418	343	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→
Pau-1-1	NZ_BAKF01000067.1	-	163	88	RNA→	
Psp-9-1	NZ_JIAF01000004.1	-	988952	988877	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-725	SRS055401_C2262988	-	171	96	RNA→	hypo→
env-726	SRS016746_C3112314	-	171	96	RNA→	hypo→
env-727	Contig7208859.1	-	113	38	RNA→	
env-728	SRS048411_C6994262	+	2390	2465	RNA→	
env-729	SRS013723_C3473767	+	936	1011	RNA→	hypo→
env-730	SRS020226_C3504182	+	3062	3137	RNA→	hypo→
env-731	SRS022149_C2844760	-	185	110	RNA→	hypo→
env-732	SRS023595_Baylor_scaffold_12538	-	315	240	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→
env-733	SRS017511_Baylor_scaffold_37568	-	3386	3311	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-734	SRS062761_C4185168	-	157	82	RNA→	hypo→
env-735	SRS063603_LANL_scaffold_16033	+	3063	3138	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→
env-736	SRS049268_C4330408	+	785	860	RNA→	hypo→
Pin-3-1	NZ_ATMK01000012.1	-	3560	3485	RNA→	rplM (PRK09216)Ribosomal_L13 (pfam00572)→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)→

Pfa-1-1	NZ_BAJY01000023.1	+	18148	18223	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-737	SRS049318_LANL_scaffold_111644	+	3483	3558	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pin-2-1	NZ_KE392224.1	+	52909	52984	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-738	SRS014474_C725551	+	364	439	RNA →	
env-739	SRS014477_C1641189	+	1209	1284	RNA →	
env-740	SRS015061_C521155	-	3425	3350	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-741	SRS015062_WUGC_scaffold_566	-	3425	3350	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-742	SRS047634_C4505245	+	2722	2797	RNA →	
Pdi-3-1	NZ_KI259320.1	-	18576	18501	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-743	SRS017521_Baylor_scaffold_47871	-	90	15	RNA →	
Pdi-2-1	NZ_AEDO01000037.1	+	25023	25098	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pdi-1-1	NZ_JRNR01000099.1	-	3529	3454	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-744	NOM017_scaffold152_1	+	2821	2896	RNA →	
env-745	4448812.3_Contig1872	+	367	442	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-746	DLM003_scaffold159_2	+	2840	2915	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-747	NOM022_scaffold34272_1	+	2699	2774	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-748	contig104641	+	10740	10815	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-749	DLM001_scaffold46771_1	-	555	480	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-750	DOM003_scaffold20629_2	+	164	239	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-751	NLM001_scaffold44488_1	+	2699	2774	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-752	SRS011271_WUGC_scaffold_12531	+	603	678	RNA →	
env-753	4448818.3_Contig13931	-	222	147	RNA →	rplM (PRK09216) →
env-754	NLM006_scaffold2689_1	-	559	484	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-755	SRS015794_Baylor_scaffold_8969	+	743	818	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-756	DOF011_scaffold4575_1	+	2870	2945	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-757	NLM004_scaffold39342_1	-	326	250	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-758	DLF003_scaffold48930_1	+	25126	25201	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-759	NLM004_scaffold4959_1	-	319	244	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-760	NOM012_scaffold33926_2	-	272	197	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-761	scaffold3211.3_V1_CD-2	+	538	613	RNA →	
env-762	SRS019910_WUGC_scaffold_54703	+	204	279	RNA →	
env-763	DLM001_scaffold46772_1	-	551	476	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-764	DOM016_scaffold20994_2	+	58303	58378	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-765	SRS013521_LANL_scaffold_8254	-	121	46	RNA →	
env-766	NLM016_scaffold16524_1	-	542	467	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-767	4491403.3_NODE_17602	-	322	247	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-768	SRS049959_WUGC_scaffold_5722	-	414	338	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-769	scaffold28598_1_V1_UC-17	-	126	50	RNA →	
env-770	scaffold2660_2_MH0049	+	139	215	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-771	4491403.3_NODE_60160	-	980	904	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-772	SRS013521_LANL_scaffold_15414	-	158	82	RNA →	hypō →
env-773	SRS049995_LANL_scaffold_36980	+	752	828	RNA →	
env-774	BAAX01002455.1	+	95	171	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-775	SRS015794_C2240237	+	338	414	RNA →	
env-776	DLM006_scaffold20724_1	+	4613	4689	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-777	NLF006_scaffold9001_1	-	11920	11844	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-778	NLM002_scaffold28362_1	+	827	903	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-779	NLM004_scaffold34280_1	+	818	894	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-780	NLM006_scaffold7359_1	+	197	273	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-781	DLM002_scaffold24298_1	+	12011	12086	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-782	NOF010_scaffold54121_1	+	59215	59290	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →

env-783	NOM009_scaffold53764_1	+	59215	59290	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-784	NOM017_scaffold40285_1	+	1439	1514	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-785	NLM004_scaffold29467_1	+	19562	19637	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-786	SRS022609_Baylor_scaffold_13243	+	21067	21142	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-787	4491403.3_NODE_11716	+	384	459	RNA →		
env-788	DLM027_scaffold23115_4	+	11864	11939	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-789	4448819.3_Contig631	-	7314	7239	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-790	4448812.3_Contig639	+	2967	3042	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-791	scaffold18566_1_MH0009	-	109	34	RNA →		
env-792	NLM016_scaffold16376_1	-	143	68	RNA →		
env-793	scaffold58558_1_MH0065	+	213	288	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-794	4491477.3_NODE_2169	-	8743	8668	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-795	SRS015782_WUGC_scaffold_26114	-	11843	11768	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-796	SRS024132_Baylor_scaffold_32360	-	11900	11825	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-797	scaffold43386_1_MH0050	+	966	1041	RNA →		
env-798	4448813.3_Contig493	-	5921	5846	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-799	NOF001_scaffold377_4	-	5305	5230	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-800	CAM_READ_0099651871	-	384	309	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-801	SRS047044_WUGC_scaffold_16328	+	257	332	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-802	4444165.3_02693	+	265	340	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-803	4448807.3_Contig1253	-	1893	1817	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-804	NLM008_scaffold29501_1	-	12251	12176	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-805	NLM024_scaffold18343_2	+	16425	16500	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-806	NOM013_scaffold52528_1	-	10498	10423	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-807	SRS017849_C4402944	-	468	393	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-808	C4444188_1_MH0077	+	224	299	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-809	4448817.3_Contig838	-	764	689	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-810	4491404.3_NODE_16218	+	95	170	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-811	4491414.3_NODE_1809	+	43317	43392	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-812	4491421.3_NODE_2987	+	40037	40112	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-813	DLF006_scaffold45333_1	+	259	334	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-814	DLM005_scaffold13338_1	+	240	315	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-815	DLM017_scaffold38149_2	-	11964	11889	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-816	DOM001_scaffold19626_3	+	109863	109938	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-817	DOM003_scaffold20232_1	+	1899	1974	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-818	NOM019_scaffold53163_1	+	23837	23912	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-819	SRS019910_WUGC_scaffold_10772	+	132	207	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-820	SRS053398_LANL_scaffold_37336	+	287	362	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-821	4448820.3_Contig_1858	-	2732	2657	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-822	DLF003_scaffold47495_1	+	445	520	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-823	DOM023_scaffold26204_1	-	12481	12406	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-824	4448818.3_Contig459	-	19229	19154	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-825	4448811.3_Contig642	-	2634	2559	RNA →	rplM (PRK09216)RplM (COG0102) →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-826	4448814.3_Contig2119	+	771	846	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-827	scaffold12317_1_MH0026	-	272	197	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-828	scaffold30210_1_MH0049	-	536	461	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-829	4448810.3.47000	-	13461	13386	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-830	4448816.3_Contig1564	-	700	625	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-831	NOM001_scaffold36808_1	-	12342	12267	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-832	CAM_READ_0099565819	+	27	102	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-833	4448808.3_Contig33004	-	288	214	RNA →	rplM (PRK09216)RplM (COG0102) →	

env-834	NLM016_scaffold13879_1	-	134	59	RNA	→ hypo	→
env-835	scaffold9468_1.O2.UC-12	+	3921	3996	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→
env-836	NLM006_scaffold9242_1	+	439	514	RNA	→ rplM (PRK09216)RplM (COG0102)	→
env-837	NLM009_scaffold10030_1	+	15733	15808	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
Pco-2-1	NZ_GG703855.1	-	96347	96272	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-838	contig13883	-	85	10	RNA	→ hypo	→
env-839	DLF004_scaffold32113_1	-	12265	12190	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-840	SRS013687_Baylor_scaffold_46077	-	545	470	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→
env-841	SRS023914_Baylor_scaffold_16462	+	15313	15388	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-842	SRS049959_WUGC_scaffold_10211	-	449	374	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→
env-843	scaffold2008_3.V1.UC-21	+	224	299	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-844	NOM020_scaffold12283_2	-	11931	11856	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
Por-8-1	NZ_KK073873.1	+	3030252	3030326	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
Psp-21-1	NZ_JRPT01000012.1	-	33492	33419	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-845	RUMENNODE_2697187_1	-	3085	3011	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-846	AUXO015280558.1	-	453	379	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→
env-847	AUXO011297008.1	-	1734	1660	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-848	SRS013723_Baylor_scaffold_19570	+	4339	4413	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-849	SRS012285_C2809459	-	149	75	RNA	→ hypo	→
env-850	SRS019980_C2790887	-	135	61	RNA	→ hypo	→
env-851	SRS016043_WUGC_scaffold_31124	+	1754	1828	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→
env-852	SRS011152_Baylor_scaffold_57690	-	154	80	RNA	→	
env-853	SRS013836_C4801934	+	838	912	RNA	→	
env-854	SRS045313_C1296217	-	154	80	RNA	→ hypo	→
env-855	SRS022725_LANL_scaffold_20670	-	412	338	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→
env-856	SRS022149_C2846288	+	4393	4467	RNA	→	
env-857	SRS051930_C3273277	+	1215	1289	RNA	→	
env-858	SRS042984_LANL_scaffold_16758	+	9998	10072	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-859	SRS052876_LANL_scaffold_54535	+	954	1028	RNA	→	
Pco-1-1	NZ_HE999443.1	-	281229	281155	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-860	SRS014578_WUGC_scaffold_18370	-	7328	7254	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-861	SRS013170_Baylor_scaffold_112597	+	2727	2801	RNA	→	
env-862	SRS043239_C1976103	-	186	112	RNA	→ hypo	→
env-863	SRS063999_LANL_scaffold_2422	-	7865	7791	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-864	SRS016360_Baylor_scaffold_11199	-	720	646	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-865	SRS019128_C4357049	-	303	229	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→
env-866	SRS024087_LANL_scaffold_47659	-	135	61	RNA	→	
env-867	SRS063932_LANL_scaffold_92613	+	4336	4410	RNA	→	
env-868	SRS024289_LANL_scaffold_70016	-	135	61	RNA	→	
env-869	SRS018443_Baylor_scaffold_65820	+	8016	8090	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-870	SRS018337_C2365684	+	512	586	RNA	→	
env-871	SRS063215_LANL_scaffold_21409	-	945	871	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-872	SRS014107_WUGC_scaffold_50706	-	134	60	RNA	→	
env-873	SRS015044_WUGC_scaffold_67840	-	135	61	RNA	→	
env-874	SRS016331_C4131247	-	156	82	RNA	→	
env-875	SRS017139_C3804675	-	135	61	RNA	→	
env-876	SRS024355_LANL_scaffold_42842	-	1441	1367	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
Psp-25-1	NZ_GG740073.1	-	461425	461351	RNA	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)	→ rplM (PRK09216)Ribosomal_L13 (pfam00572)
							→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
							→ rpsI (PRK00132)Ribosomal_S9 (pfam00380)
env-877	SRS011343_C2242542	+	1051	1125	RNA	→	
env-878	SRS014691_C2503925	-	145	71	RNA	→ hypo	→
env-879	SRS019028_WUGC_scaffold_45064	-	145	71	RNA	→ hypo	→

env-880	SRS015574_WUGC_scaffold_63161	+	871	945	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-881	SRS016746_Baylor_scaffold_73191	+	1882	1956	RNA →	
env-882	SRS017511_Baylor_scaffold_92834	-	135	61	RNA →	
env-883	SRS023358_C3462583	+	482	556	RNA →	
env-884	SRS049318_LANL_scaffold_32648	+	9208	9282	RNA →	
env-885	SRS050628_LANL_scaffold_20687	-	978	904	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-886	SRS022719_LANL_scaffold_45285	-	804	729	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-887	SRS019129_WUGC_scaffold_43257	-	338	263	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-888	SRS016043_C2115867	-	218	143	RNA →	rplM (PRK09216)RplM (COG0102) →
env-889	SRS013533_PGA_scaffold_117699	+	3103	3178	RNA →	
env-890	SRS017511_Baylor_scaffold_92627	+	951	1026	RNA →	
env-891	SRS021477_C2588523	-	323	248	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-892	SRS013170_Baylor_scaffold_67347	-	307	232	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-893	SRS064449_C4126558	-	118	43	RNA →	
env-894	SRS053917_LANL_scaffold_88433	+	607	682	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-895	SRS013252_C3525919	-	153	78	RNA →	hypo →
env-896	SRS015803_C2675896	+	3433	3508	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-897	SRS018394_C4057209	-	982	907	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-898	SRS024649_LANL_scaffold_51754	-	635	560	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-899	SRS054430_LANL_scaffold_20956	-	988	913	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Plo-1-1	NZ_KB899213.1	+	249357	249432	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-900	SRS017445_Baylor_scaffold_83464	+	1528	1603	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-901	SRS018573_C2480980	-	139	64	RNA →	
env-902	SRS045197_WUGC_scaffold_65903	+	7998	8073	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Psp-26-1	NZ_GG704825.1	-	516881	516806	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → hypo → rpsB (PRK05299)Ribosomal_S2 (pfam00318) → tsf (PRK09377)UBA_EF-Ts (cd14275)EF_TS (pfam00889) →
env-903	SRS023841_Baylor_scaffold_21872	-	947	872	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-904	SRS011098_C1871947	-	560	485	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-905	SRS011255_C2493253	-	151	76	RNA →	
env-906	SRS016746_C2995254	+	311	386	RNA →	
env-907	SRS017227_C5088817	+	278	353	RNA →	
env-908	SRS018157_Baylor_scaffold_33504	+	7670	7745	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-909	SRS018665_C3707955	+	500	575	RNA →	
env-910	SRS019906_C2276695	+	7839	7914	RNA →	
env-911	SRS023595_C6887425	-	139	64	RNA →	hypo →
env-912	SRS023938_C2241954	-	119	44	RNA →	hypo →
env-913	SRS024087_LANL_scaffold_42583	-	139	64	RNA →	
env-914	SRS051378_C1873917	-	1295	1220	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-915	SRS051941_LANL_scaffold_77484	-	153	78	RNA →	
env-916	SRS052604_LANL_scaffold_13013	+	539	614	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-917	SRS055401_C2209469	+	195	270	RNA →	
env-918	SRS058053_LANL_scaffold_60299	+	304	379	RNA →	
env-919	SRS063603_C4249750	-	118	43	RNA →	
env-920	SRS063932_LANL_scaffold_98774	-	139	64	RNA →	
env-921	SRS017808_C3874880	-	146	71	RNA →	
env-922	SRS017439_Baylor_scaffold_51404	-	632	557	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-923	SRS075404_LANL_scaffold_60611	+	3391	3466	RNA →	
env-924	SRS012279_Baylor_scaffold_46820	+	3560	3635	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-925	SRS013705_Baylor_scaffold_63054	+	3114	3189	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-926	SRS013879_C2765042	+	277	352	RNA →	
env-927	SRS017209_Baylor_scaffold_40939	+	72651	72726	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-928	SRS018357_Baylor_scaffold_46794	+	98	173	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →

env-929	SRS022077_Baylor_scaffold_41018	+	3560	3635	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-930	SRS023926_Baylor_scaffold_55027	+	3644	3719	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-931	SRS050669_LANL_scaffold_50571	+	3562	3637	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-932	SRS064329_LANL_scaffold_50907	-	985	910	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-933	Tongue_dor_WUGI_scaffold_12918	+	1043	1118	RNA →
env-934	SRS011306_Baylor_scaffold_62841	-	35842	35767	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-935	SRS014573_WUGC_scaffold_21848	+	3270	3345	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-936	SRS015762_C3664821	+	2929	3004	RNA →
env-937	SRS016002_C2493893	-	135	60	RNA → hypo →
env-938	SRS018300_Baylor_scaffold_10118	+	3538	3613	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-939	SRS018739_WUGC_scaffold_27638	+	3156	3231	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-940	SRS019389_C2124919	-	146	71	RNA → hypo →
env-941	SRS024081_LANL_scaffold_17499	+	2653	2728	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-942	SRS024441_LANL_scaffold_33890	+	6153	6228	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-943	SRS049389_WUGC_scaffold_44708	-	146	71	RNA →
env-944	SRS053603_LANL_scaffold_56769	+	3538	3613	RNA →
env-945	SRS057205_LANL_scaffold_36133	-	1438	1363	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-946	SRS063193_LANL_scaffold_48783	+	3570	3645	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-947	SRS064774_C2783916	-	146	71	RNA → hypo →
Psh-1-1	NZ_BAI01000030.1	-	35483	35408	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-948	SRS022143_WUGC_scaffold_91746	-	632	557	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-949	SRS019327_WUGC_scaffold_70870	-	10558	10483	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-950	SRS015434_C5949372	-	146	71	RNA →
env-951	SRS018439_Baylor_scaffold_22146	-	17449	17374	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-952	SRS019071_C5217890	+	1981	2056	RNA →
env-953	SRS013164_Baylor_scaffold_59130	-	979	904	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-954	SRS014888_C3104655	-	146	71	RNA →
env-955	SRS023958_Baylor_scaffold_31813	+	3560	3635	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-956	SRS057355_C2359830	-	146	71	RNA →
env-957	SRS021496_C2846806	-	146	71	RNA →
env-958	SRS022530_LANL_scaffold_60444	-	7595	7520	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-959	SRS063288_C2558656	+	371	446	RNA →
env-960	scaffold15263_2_MH0055	-	943	868	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-961	scaffold18695_5_MH0014	+	2193	2268	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-962	scaffold58703_4_MH0042	+	509	584	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-963	scaffold410_3_MH0063	-	5281	5206	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-964	scaffold1879_1_O2.UC-24	+	1299	1374	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-965	scaffold6667_6_V1.UC-14	-	958	883	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-966	4491482.3_NODE.74973	-	6204	6129	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-967	BAAX01036178.1	-	165	88	RNA →
env-968	4491403.3_NODE_60304	-	979	902	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-969	DLF003_scaffold24849.4	-	8212	8135	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-970	NLM016_scaffold8572.3	-	1028	951	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-971	4491404.3_NODE_3637	+	6552	6629	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-972	DLM006_scaffold334.9	+	10545	10622	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-973	scaffold78050_1_O2.UC-19	+	162	239	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-974	DOM016_scaffold1189_4	+	9750	9827	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-975	DOM022_scaffold19179_2	+	11637	11714	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-976	SRS011529_WUGC_scaffold_9481	+	35	112	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pst-1-1	NZ_JH379462.1	-	10330	10253	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-977	NLF006_scaffold10643.1	-	1262	1185	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →

env-978	NLM029_scaffold46472_1	-	9492	9415	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-979	NLF005_scaffold222_5	+	9773	9850	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-980	NOM007_scaffold112_4	+	15977	16054	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-981	NLM025_scaffold10432_10	-	8972	8895	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-982	DLM002_scaffold10936_3	+	5488	5565	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-983	NLM009_scaffold4804_2	+	26579	26656	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-984	NLM002_scaffold27297_2	-	9435	9358	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-985	UnmappedStool_Broad_scaffold_727222	-	162	82	RNA →	hypo →
env-986	4491404.3_NODE_8492	+	545	625	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-987	SRS016541_C1524265	+	279	359	RNA →	
env-988	SRS013687_Baylor_scaffold_57705	+	279	359	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-989	SRS023914_Baylor_scaffold_14686	+	279	359	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-990	BAAx01006449.1	-	273	193	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-991	NLF006_scaffold165_1	-	402	322	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-992	4491403.3_NODE_60304	-	780	700	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-993	SRS049959_C3758114	-	124	44	RNA →	hypo →
env-994	scaffold29644_4_O2_UC-13	-	6421	6346	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbu-3-1	NZ_GG739928.1	-	179846	179770	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbu-1-1	NZ_JVYX01000008.1	-	5815	5739	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbu-2-1	NZ_GL586311.1	+	1240091	1240167	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Psp-12-1	NZ_ALJQ01000010.1	-	159165	159089	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-995	AUXO015968780.1	+	216	290	RNA →	
env-996	AUXO017534585.1	-	968	894	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-997	pre-rum113-00662	-	3481	3406	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-998	pre-rum114-03875	+	2977	3052	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-999	HCE12Call500_c0260910	+	4902	4978	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1000	HCF12C_329458	-	179	103	RNA →	← hypo
Por-1-1	NZ_GL833119.1	-	125193	125119	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Por-3-1	NZ_KE340302.1	-	130474	130400	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1001	SRS013836_C4829201	-	117	43	RNA →	
Por-2-1	NZ_KI669542.1	-	130434	130360	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1002	SRS023604_Baylor_scaffold_3034	+	34418	34492	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1003	SRS013542_C165903	-	485	411	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
Pti-3-1	NZ_JRPQ01000080.1	+	19409	19483	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1004	SRS011111_Baylor_scaffold_4265	+	5684	5758	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
Pti-1-1	NZ_HG417093.1	-	162971	162897	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pti-2-1	NZ_ADEF01000048.1	+	153828	153902	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1005	SRS023468_LANL_scaffold_1144	-	3752	3678	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1006	SRS023604_Baylor_scaffold_2736	-	116	42	RNA →	hypo →
Psp-4-1	NZ_AWXC01000037.1	-	65697	65623	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbu-6-1	NZ_JRNP01000028.1	+	52030	52104	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1007	SRS011111_Baylor_scaffold_12781	-	1177	1103	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbu-5-1	NZ_JRNN01000034.1	+	33581	33655	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbu-4-1	NZ_ADEG01000023.1	-	35564	35490	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1008	SRS017511_Baylor_scaffold_48340	-	333	258	RNA →	hypo → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
Pen-1-1	NZ_BAIX01000001.1	+	113639	113714	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1009	SRS013950_C2181444	-	1427	1352	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1010	SRS014107_WUGC_scaffold_54517	-	223	148	RNA →	rplM (PRK09216)RplM (COG0102) →

env-1011	SRS014476_C3414245	+	514	589	RNA →	rplM (PRK09216)RplM (COG0102) →
env-1012	SRS014691_C2727318	+	851	926	RNA →	
env-1013	SRS016746_Baylor_scaffold_78063	+	1074	1149	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1014	SRS017227_Baylor_scaffold_162432	-	14350	14275	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1015	SRS019029_WUGC_scaffold_53097	+	1214	1289	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1016	SRS047634_LANL_scaffold_137848	+	8745	8820	RNA →	
Ppl-1-1	NZ_AWET01000036.1	+	123358	123433	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1017	Buccal_mucosa_LANL_C64865474	+	28	103	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1018	SRS011255_C2371241	-	446	371	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1019	SRS047113_LANL_scaffold_81006	+	28	103	RNA →	hypo → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1020	SRS058808_C2744514	+	90	165	RNA →	hypo → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
Ppl-2-1	NZ_BAJN01000002.1	-	253813	253738	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1021	scaffold29515_4.MH0046	-	478	404	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1022	scaffold6118_1.MH0049	+	1778	1852	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1023	scaffold121376_1.MH0056	-	1807	1733	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1024	4448812.3.Contig33336	+	223	300	RNA →	
env-1025	DLF003_scaffold46021.1	-	4697	4623	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1026	NOF001_scaffold14758.1	-	4682	4608	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1027	SRS017227_C4992648	-	155	81	RNA →	hypo →
Pma-4-1	NZ_GL397214.1	-	1714297	1714223	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1028	SRS023595_Baylor_scaffold_66299	+	21	95	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pma-5-1	NZ_BA_JI01000002.1	-	152336	152262	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → hypo → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1029	AUXO014575475.1	+	800	874	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1030	RUMENNODE.3847963.1	+	42999	43073	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1031	AUXO014586155.1	+	7411	7485	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1032	HCF12C_125474	-	35705	35631	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1033	HCE12Call500_c0173985	+	472	546	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1034	NLF006_scaffold31027_2	-	1626	1552	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1035	AUXO013075926.1	+	551	625	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1036	RUMENNODE.4167426_1	+	15701	15775	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1037	AUXO014456099.1	-	1496	1422	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1038	scaffold2367_2.V1.UC-14	-	1330	1257	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1039	4491414.3.NODE_1526	-	5046	4973	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1040	DLF003_scaffold16038_8	-	1088	1015	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1041	DLF005_scaffold3173_4	-	4285	4212	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1042	NOM012_scaffold23711_5	+	2538	2611	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1043	scaffold1280_4.V1.UC-13	-	11294	11221	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1044	SRS015663_WUGC_scaffold_11548	+	5547	5620	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1045	SRS051031_LANL_scaffold_24636	-	16175	16102	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1046	scaffold8699_1.MH0021	+	371	444	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1047	C1729250_1.MH0022	-	754	681	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1048	scaffold49_1.MH0057	+	5529	5602	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1049	scaffold98913_1.O2.UC-19	-	593	520	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1050	scaffold80421_1.O2.UC-1	+	180	253	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1051	DLM018_scaffold38383_1	+	191	264	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1052	4491401.3.NODE_2070	-	1171	1098	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1053	4491477.3.NODE_12413	+	2389	2462	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Psp-2-1	NZ_LFQU01000025.1	+	6048	6121	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1054	4491405.3.NODE_34345	+	86865	86938	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1055	scaffold4912_4.MH0034	-	2299	2226	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1056	C1986582_1.MH0079	+	198	271	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1057	scaffold47598_1.O2.UC-11	+	2719	2792	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →

env-1058	AUXO010723907.1	-	1439	1366	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1059	SRM_contig03116	+	29	103	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1060	AUXO013680712.1	+	1792	1865	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1061	SRS049959_WUGC_scaffold_56943	-	909	836	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Psp-13-1	NZ_JXQH01000086.1	+	71385	71458	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Psp-14-1	NZ_JXQI01000060.1	+	39882	39955	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1062	scaffold253617_1_MH0006	+	404	477	RNA →		
Psp-17-1	NZ_JXQJ01000163.1	+	35397	35470	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1063	NOM022_scaffold35257_3	+	8385	8458	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
Psp-15-1	NZ_JXQK01000088.1	+	79922	79995	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Psp-16-1	NZ_JXQL01000086.1	-	112978	112905	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1064	BAAX01026741.1	-	768	695	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1065	scaffold15697_4_MH0030	-	142	69	RNA →		
env-1066	NOM022_scaffold26603_2	-	448	375	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1067	AUXO015787294.1	-	1451	1378	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Hse-1-1	NZ_JADU01000007.1	+	92405	92478	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1068	scaffold4605_11_MH0050	-	3079	3003	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1069	HCE12Call500_c0256376	-	434	359	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1070	HCF14C_2.1_1_newblercontig23395	+	452	527	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1071	AUXO017008710.1	+	176	252	RNA →	hypo →	
env-1072	HCF14C_3223	-	3241	3167	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1073	HCF12C_138759	-	454	380	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1074	HCF14C_3378	+	16846	16920	RNA →		
env-1075	HCF12C_432612	+	209	283	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1076	AUXO011672201.1	-	118	44	RNA →		
env-1077	AUXO010615907.1	-	963	889	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1078	RUMENNODE.3874741_74000	+	4185	4261	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1079	AUXO013969103.1	+	2307	2382	RNA →		
env-1080	AUXO015357845.1	+	1768	1843	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1081	SRM_contig10604	+	931	1006	RNA →		
env-1082	SRMUA_GNVGR9Q01BHOFT	-	77	2	RNA →		
env-1083	SRMUA_GNVGR9Q01BGO0O	-	154	79	RNA →		
env-1084	AUXO010497420.1	+	284	358	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1085	AUXO018287067.1	-	792	718	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1086	AUXO015587525.1	+	974	1048	RNA →		
env-1087	AUXO011220652.1	+	3323	3399	RNA →		
env-1088	AUXO012321124.1	-	85	11	RNA →		
env-1089	AUXO014609123.1	-	80	6	RNA →		
env-1090	AUXO018327041.1	+	2387	2463	RNA →		
env-1091	AUXO018475375.1	-	90	14	RNA →	← hypo	
env-1092	SRMUA_GMSDS1U03GX2P3	+	122	197	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1093	AUXO015617850.1	+	121	196	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1094	AUXO010064957.1	-	160	84	RNA →	hypo →	
env-1095	AUXO012890930.1	-	277	202	RNA →		
env-1096	RUMENNODE.1622158_1	+	23986	24061	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1097	AUXO012504799.1	+	349	424	RNA →		
env-1098	RUMENNODE.4144373_1	-	20587	20512	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Psp-7-1	NZ_KN050820.1	-	266447	266372	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1099	4491686.3.305921	-	489	414	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1100	4491686.3.312252	+	219	294	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
Psp-11-1	NZ_JHUW01000006.1	+	275505	275580	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →

Psp-19-1	NZ_JHVE01000005.1	+	85620	85695	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Psp-18-1	NZ_JNKF01000010.1	+	588125	588200	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1101	4491686.3.93290	-	116	41	RNA →		
Pru-1-1	NC_014033.1	+	3193901	3193976	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pru-2-1	NZ_JHXD01000002.1	+	95378	95453	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Psp-20-1	NZ_JNKG01000008.1	+	135579	135654	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1102	AUXO018400480.1	-	139	64	RNA →		
env-1103	AUXO015757529.1	-	664	588	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1104	AUXO015472756.1	-	170	95	RNA →		
Pbr-1-1	NZ_JHXM01000009.1	-	128416	128341	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pbr-2-1	NZ_KK211353.1	-	323686	323611	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1105	AUXO010774619.1	-	135	60	RNA →		
env-1106	AUXO016205324.1	+	977	1053	RNA →		
env-1107	AUXO018699643.1	-	84	9	RNA →		
env-1108	AUXO010272107.1	+	282	357	RNA →	← hypo	
env-1109	AUXO014911040.1	+	6911	6987	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1110	AUXO018573799.1	-	2207	2131	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1111	AUXO016034740.1	-	861	785	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1112	AUXO013985143.1	+	1048	1123	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1113	AUXO012106665.1	+	1076	1151	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1114	AUXO010611192.1	+	2306	2381	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1115	AUXO017780793.1	+	2412	2486	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1116	AUXO016964339.1	-	2517	2443	RNA →	← hypo	
env-1117	DLM014_scaffold29163_3	-	749	677	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1118	AUXO012501382.1	+	1300	1372	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1119	RUMENNODE_4186824_1	-	20452	20380	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1120	HCE12Call500_c0163880	-	1019	945	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1121	HCF14C_7730	+	2022	2096	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1122	HCF12C_211171	+	370	445	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1123	4491686.3.18377	-	3185	3110	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1124	4491686.3.998042	+	30719	30794	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1125	HCF12C_268453	+	254	328	RNA →		
env-1126	HCF12C_148665	+	852	926	RNA →	hypo →	
env-1127	HCE12Call500_c0204626	-	679	605	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)rps9 (CHL00079) →
env-1128	HCF12C_185472	+	268	342	RNA →	rplM (PRK09216)RplM (COG0102) →	
env-1129	4491421.3_NODE.9264	+	154	230	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1130	AUXO015981657.1	-	1275	1203	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1131	AUXO010201767.1	+	271	345	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1132	AUXO014390899.1	-	563	489	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1133	AUXO015967901.1	+	641	712	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1134	AUXO015633410.1	+	206	279	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1135	AUXO017839357.1	+	144	211	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1136	AUXO016134445.1	+	192	259	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1137	SRS064449_C3977517	+	160	232	RNA →	rplM (PRK09216)RplM (COG0102) →	
env-1138	SRS013170_C4245439	-	179	107	RNA →		
env-1139	SRS019071_C4979592	+	177	249	RNA →		
env-1140	SRS063999_C3760459	+	1331	1403	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1141	SRS053917_LANL_scaffold_97956	+	384	456	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1142	SRS049318_LANL_scaffold_147506	+	27	99	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1143	SRS047634_C4471531	-	1001	929	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1144	SRS022602_Baylor_scaffold_89900	-	465	393	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →	
env-1145	SRS019028_C2913254	-	170	98	RNA →		

env-1146	SRS063603.LANL_scaffold_35578	+	6849	6921	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1147	SRS016225.WUGC_scaffold_29763	+	2155	2226	RNA →	
env-1148	SRS022621.Baylor_scaffold_78299	+	1192	1263	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1149	SRS022719.LANL_scaffold_24264	-	1070	999	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1150	SRS023926.C2746934	+	199	270	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1151	SRS014888.C3094079	-	1005	933	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1152	SRS057355.LANL_scaffold_38534	+	74	146	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1153	SRS018739.C3681903	-	158	86	RNA →	
env-1154	SRS013164.Baylor_scaffold_53891	-	1272	1200	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1155	SRS015797.WUGC_scaffold_34484	-	665	593	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1156	SRS042131.WUGC_scaffold_59323	-	801	729	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1157	SRS024441.LANL_scaffold_55878	-	1004	932	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1158	SRS016037.WUGC_scaffold_44051	-	27077	27005	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1159	SRS018357.Baylor_scaffold_49795	+	563	635	RNA →	
env-1160	SRS044662.LANL_scaffold_9532	+	25254	25326	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1161	SRS045127.LANL_scaffold_15711	-	3179	3107	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1162	SRS049147.C4127564	+	678	750	RNA →	
env-1163	Palatine_Tonsils.LANL_C6209475	+	331	403	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1164	SRS015434.C5847974	-	383	311	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1165	SRS017533.Baylor_scaffold_51088	+	1318	1390	RNA →	
env-1166	SRS019327.C2789739	+	1129	1201	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1167	Buccal_mucosa.LANL_scaffold_123568	-	308	236	RNA →	rplM (PRK09216)Ribosomal_L13 (cd00392) →
env-1168	SRS015985.C1563967	+	138	210	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1169	SRS062878.LANL_scaffold_81556	+	2146	2218	RNA →	rplM (PRK09216)RplM (COG0102) →
env-1170	SRS075404.C3564214	-	158	86	RNA →	hypo →
env-1171	Throat.LANL_C5768501	+	142	214	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1172	SRS011306.Baylor_scaffold_57099	+	475	547	RNA →	rplM (PRK09216)RplM (COG0102) →
env-1173	SRS013879.WUGC_scaffold_12081	+	2721	2793	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1174	SRS013947.C1628089	-	350	278	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1175	SRS013948.WUGC_scaffold_13434	+	25402	25474	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1176	SRS014271.C2902322	-	158	86	RNA →	
env-1177	SRS015762.WUGC_scaffold_30677	-	1005	933	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1178	SRS016002.C2530304	+	27	99	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1179	SRS016569.C2383578	+	27	99	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1180	SRS017209.Baylor_scaffold_3818	+	25398	25470	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1181	SRS018145.Baylor_scaffold_64	+	25195	25267	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1182	SRS018439.Baylor_scaffold_41344	-	879	807	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1183	SRS019071.C4950970	-	163	91	RNA →	hypo →
env-1184	SRS019120.C1301558	+	33	105	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1185	SRS019126.WUGC_scaffold_35353	+	161	233	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1186	SRS023958.Baylor_scaffold_34017	+	4806	4878	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1187	SRS024081.C2561546	+	437	509	RNA →	
env-1188	SRS050669.LANL_scaffold_65278	-	28287	28215	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1189	SRS057205.LANL_scaffold_2683	-	1005	933	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1190	SRS057692.C2560902	+	134	206	RNA →	
env-1191	SRS058336.LANL_scaffold_19337	-	5666	5594	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1192	SRS015057.WUGC_scaffold_40957	-	277	205	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1193	SRS063603.LANL_scaffold_3918	-	1001	931	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1194	SRS016746.Baylor_scaffold_3854	+	350	421	RNA →	
Psp-1-1	NZ_KB290717.1	-	518225	518153	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1195	SRS013949.C3355882	-	134	64	RNA →	hypo →

env-1196	SRS024087_C3225267	-	91	21	RNA → hypo →
env-1197	SRS013950_C2065648	-	258	188	RNA → rplM (PRK09216)RplM (COG0102) →
env-1198	SRS018157_C4805273	-	576	506	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1199	SRS019128_C4141267	+	154	224	RNA →
env-1200	SRS047634_LANL_scaffold_18390	+	479	549	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1201	SRS055401_C2292367	-	364	294	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1202	SRS063932_LANL_scaffold_79042	+	232	302	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1203	SRS015803_WUGC_scaffold_2190	+	350	420	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1204	SRS024289_LANL_scaffold_56240	+	232	302	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1205	SRS023938_C2238754	-	301	231	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1206	SRS012285_C2904644	-	382	310	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1207	SRS017227_Baylor_scaffold_121114	+	26	98	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1208	SRS023595_Baylor_scaffold_24496	+	230	302	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1209	SRS047113_C5260445	-	272	200	RNA → rplM (PRK09216)RplM (COG0102) →
env-1210	SRS050628_C1880365	+	114	186	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1211	SRS019028_C3034176	-	899	827	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1212	SRS019029_C3106614	+	230	302	RNA →
env-1213	SRS016037_C2055413	-	3265	3192	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1214	SRS022719_LANL_scaffold_71174	-	5214	5141	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1215	SRS044662_LANL_scaffold_46735	-	2254	2181	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1216	SRS013164_Baylor_scaffold_32078	+	335	407	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1217	SRS013879_WUGC_scaffold_46467	-	1318	1246	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1218	SRS015434_C5929714	-	1009	937	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1219	SRS019071_C5025454	-	172	100	RNA → hypo →
env-1220	SRS023958_Baylor_scaffold_23657	+	335	407	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1221	SRS049389_WUGC_scaffold_42978	-	343	271	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1222	SRS052227_LANL_scaffold_7065	-	172	100	RNA →
env-1223	SRS011140_C5077184	+	62	134	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1224	SRS016225_WUGC_scaffold_16679	-	161	89	RNA →
env-1225	SRS017439_C3816727	+	159	231	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1226	SRS018357_Baylor_scaffold_50190	-	1318	1246	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1227	SRS019327_WUGC_scaffold_31	+	300	372	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1228	SRS013239_Baylor_scaffold_8550	+	223	295	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1229	SRS013252_C3407129	+	146	218	RNA →
env-1230	SRS019329_C822464	-	1070	998	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1231	SRS045049_C1487558	-	103	31	RNA →
env-1232	SRS046686_C923094	+	169	241	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1233	SRS012279_C2693900	-	583	511	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1234	SRS014573_WUGC_scaffold_5954	+	353	425	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1235	SRS014888_C3088705	-	1002	930	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1236	SRS018145_Baylor_scaffold_49105	-	1318	1246	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1237	SRS019122_C5893890	+	223	295	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1238	SRS019126_C2101879	-	343	271	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1239	SRS021496_Baylor_scaffold_82682	+	222	294	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1240	SRS054569_C1464969	-	199	127	RNA → hypo →
env-1241	SRS057205_LANL_scaffold_57883	+	1002	930	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1242	SRS057692_LANL_scaffold_10341	+	335	407	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1243	SRS018739_C3498499	-	172	100	RNA → hypo →
env-1244	SRS013946_WUGC_scaffold_9812	+	797	869	RNA →
env-1245	SRS017127_Baylor_scaffold_10764	-	3240	3168	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1246	SRS019120_C1331431	+	223	295	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1247	SRS019124_WUGC_scaffold_15768	+	336	408	RNA → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →

env-1248	SRS019125_WUGC_scaffold_5306	+	336	408	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1249	SRS019128_C4205376	+	199	271	RNA →	
env-1250	SRS047113_C5255867	-	272	200	RNA →	rplM (PRK09216)RplM (COG0102) →
env-1251	SRS014473_WUGC_scaffold_265	-	32420	32348	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1252	SRS015060_WUGC_scaffold_459	+	456	528	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1253	SRS063272_LANL_scaffold_10757	-	7611	7539	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1254	SRS017215_C2622978	+	37	109	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1255	SRS049318_C6258073	-	173	101	RNA →	hypo →
env-1256	SRS016225_WUGC_scaffold_16862	-	163	90	RNA →	hypo →
env-1257	SRS018300_C3300755	-	410	337	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) →
env-1258	SRS013506_Baylor_scaffold_6896	+	328	400	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
env-1259	SRS049147_C4035837	+	173	101	RNA →	hypo →
Pmu-2-1	NZ_GL945017.1	+	791406	791482	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →
Pde-1-1	NC_019960.1	-	1444430	1444357	RNA →	rplM (PRK09216)Ribosomal_L13 (pfam00572) → rpsI (PRK00132)Ribosomal_S9 (pfam00380) →

3.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 3.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one

cd00392 (6) Ribosomal protein L13.
cd14275 (1) UBA domain found in elongation factor Ts (EF-Ts) from bacteria, chloroplasts and mitochondria of eukaryotes.
CHL00079 (3) ribosomal protein S9
COG0102 (26) Ribosomal protein L13 [Translation, ribosomal structure and biogenesis]
pfam00318 (2) Ribosomal protein S2.
pfam00380 (712) Ribosomal protein S9/S16.

3.4 Multiple-sequence alignment

Each L13-Bacteroidia RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 3.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The L13-Bacteroidia RNA itself is denoted by the line underneath marked 5’ and 3’ on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded green. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-Crick or G-U pairs. Oth-

L13-Bacteroidia RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 3.2.

pfam00572 (955) Ribosomal protein L13.
pfam00889 (1) Elongation factor TS.
PRK00132 (715) 30S ribosomal protein S9; Reviewed
PRK05299 (2) 30S ribosomal protein S2; Provisional
PRK09216 (990) 50S ribosomal protein L13; Reviewed
PRK09377 (1) elongation factor Ts; Provisional

erwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, red nucleotides: nucleotide identity conserved more than 97% of the time, black nucleotides: 90%, gray nucleotides: 75%, red circle (◐): nucleotide is present 97% of the time, black circle (◑): 90%, gray circle (◒): 75%, white circle (◓): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Bsp-1-1, Pal-1-2, Pam-2-1, Pam-4-1, Pba-1-2, Pbi-2-1, Pbi-3-1, Pbi-4-1, Pbi-5-1, Pbi-6-1, Pbr-4-1, Pbu-6-1, Pcl-1-1, Pco-1-1, Pco-3-2, Pde-5-2, Phi-1-1, Pin-2-1, Plo-1-1, Pma-2-1, Pma-5-1, Pme-1-1, Pme-2-1, Pmi-1-1, Pmi-2-1, Pmi-3-1, Pna-1-1, Pna-2-1, Pni-2-1, Por-3-1, Por-4-1, Por-7-1, Ppa-1-1, Ppa-2-1, Ppl-1-1, Pru-2-1, Psa-1-1, Psa-2-1, Psa-3-1, Psh-1-1, Psp-10-1, Psp-14-1, Psp-18-1, Psp-20-1, Psp-22-1, Psp-23-1, Pst-1-1, Pve-2-1, Pxy-1-1, env-100, env-1000, env-101, env-1010, env-1011, env-1012, env-1013, env-1014, env-1015, env-1016, env-1018, env-1019, env-102, env-1026, env-103, env-1030, env-1036, env-104, env-1041, env-1042, env-1045, env-1047, env-1048, env-1049, env-105, env-1050, env-1051, env-1057, env-106, env-107, env-1070, env-1073, env-108, env-1082, env-109, env-110, env-111, env-112, env-1121, env-1124, env-1128, 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env-989, env-99, env-991, env-998

alignment positions 1...79

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env-1  CACCGGUUUCAACAGGAAACUUACAGCGGAAGACCUUGGCCAAUAAAUAUAAAUAAGUUGUACUUUUUGCGCGCCGGAUUUUUU
env-2  CGUUCAGAUACACAAAAGUUUGCAAAAAGUUUUUGCGGUUCACAGAAAAGUUUGUACUUUUUGCGCGCCGGAUUUUUU
env-3  ACGCGGAAAUAUCACGAAAAAAGACAAAGUAGAUUUUGCCAUAGAAUAAAAAAUAAGUACUUUUUGCGCGCCGGAUUUU
env-4  CCAAAGAGUAGCAAAAUAAGUAAAAAGUUUUUGCGAGUUUGCGUAAAAAGCCGUAUUUGCGCGCCGGAUUUUUU
env-5  AUAUUUUUAACAAACAUAAACAACAGCCUCACAGCAUAAAGAAUUCUCAUUUAUUUAUUGUAACUUUGCAACUGGAAU
env-6  AAUGAAAGUGCGAAAAACUUAAAAAUUUUUUGUAGUGGGGAAAAGUGCUAACUUUGCAAGCCGGAUUUUUU

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 env-775 UCUUAAA...
 env-776 UCUUAAA...
 env-780 UUUUAAA...
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 env-785 AUUCAAA...
 env-787 AUUCAAA...
 env-788 AUUUAAA...
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 env-800 .CAUAAA...
 env-801 NNNNNN...
 env-802 UUUUAAA...
 env-803 AUUUAAA...
 env-804 AUUCAAA...
 env-808 AUUCAAA...
 env-821 UUYUAAA...
 env-822 AUUUAAA...
 env-824 AUUUAAA...
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 env-826 AUUCAAA...
 env-827 AUUCAAA...
 env-828 .ACUAAA...
 env-829 AUUCAAA...
 env-830 UCUAAA...
 env-831 AUUCAAA...
 env-832 .GUGUAA...
 env-833 AAUUUU...
 env-834 AUUUU...
 env-835 AUUCU...
 env-836 UUUCA...
 env-837 UUUU...
 Pco-2-1 UUUU...
 env-838 UUUU...
 env-839 AUUU...
 env-840 AUUC...
 env-842 AUUC...
 env-843 AUUU...
 Por-8-1 AUCU...
 Psp-21-1 AAUA...
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 env-882 ACUA...
 env-883 ACGU...
 env-885 ACUA...
 env-886 AGCGU...
 env-887 UAUUA...
 env-888 UAUUA...
 env-889 UAUUA...
 env-890 UAUUA...



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 env-10 GCCUAAUG
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 env-12 AU.....
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 env-18 AAGUUACA
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 env-88 GACACUU
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 env-711 UAAGACUA
 env-724 UAAGACUA
 Pau-1-1 AGUUUUUA
 Psp-9-1 AAGACUUA
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 Pdi-2-1 AAGACUUA
 Pdi-1-1 AAGACUUA
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 env-747 GACACACA
 env-748 GGACACAU
 env-749 GACACACAU
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 env-753 CACAUUAA
 env-754 GACACACAU
 env-755 GUAAUCGA
 env-756 GACACACA
 env-757 CAUUUAGU
 env-758 AAGACACA
 env-759 AAAGAC
 env-760 GACACACAU
 env-761
 env-762 ACAUUUAG
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 env-766 ACAUUUAG
 env-767 ACAUUUAG
 env-768 CAUUUAGU
 env-769
 env-770 CAUUUAGU
 env-771 CAUUUAGU
 env-772 CAUUUAGU

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 env-776 CAUUAAGU
 env-780 UUUCAAGA
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 env-785 ACAUUAAG
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 env-788 CACAUUAA
 env-789 CAUUAAGU
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 env-793 CACAUUAA
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 env-803 ACAUUAAG
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 env-822 ACACAUUA
 env-824 CAUUAAGU
 env-825 ■GACACA
 env-826 CACAUUAA
 env-827 CACAUUAA
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 env-829 AAGUUACA
 env-830 ■GACACAU
 env-831 ACAUUAAG
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 env-834
 env-835 CAUUAAGU
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 Por-8-1 AGACCAUU
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 env-845 ■GAUACUU
 env-846 ■GAUACUU
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 env-849
 env-851 AGACUAUU
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 env-869 AGACUAUU
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 Psp-25-1 AGACUAUU
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 env-890

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env-891 ACAAGACU
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 Psp-26-1 ACAAGACU
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 env-972 CAAGACUA
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 env-994 GACUGUUU
 Pbu-3-1 UGUAAUUA
 Pbu-1-1 UGUAAUUA
 Pbu-2-1 UGUAAUUA
 Psp-12-1 UGUAAUUA
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 env-997 UGUCGAAA
 env-999 UAUAUUU
 Por-1-1 UUUCAAAA

 env-1001 UUUCAAAA
 Por-2-1 AUAAGACU
 env-1002 AUAAGACU
 env-1003 AUAAGACU
 Pti-3-1 AUAAGACU
 env-1004 UAUAAGAC
 Pti-1-1 AUAAGACU
 Pti-2-1 AUAAGACU
 env-1005 AUAAGACU
 env-1006
 Psp-4-1 UACAAGAC
 env-1007 UACAAGAC
 Pbu-5-1 UACAAGAC
 Pbu-4-1 UACAAGAC
 env-1008 NNNNNNNN
 Pen-1-1 CAAAACUA
 env-1009 CAAAACUA
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 Ppl-2-1 CAAAACUA
 env-1021 GUUACAAG
 env-1022 GUUACAAG
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 env-1025 UACAAGAC
 env-1027 UUACAAGA
 Pma-4-1 UUACAAGA
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 env-1029 UUUUAGUU
 env-1031 UUUUAGUU
 env-1032 UAUUGAAG
 env-1033 UAUUGAAG
 env-1034 AGUUACAA
 env-1035 CAAGACUA

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env-1037 UAGUAAAU
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 env-1039 AAGUUACA
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 env-1044 AAGUUACA
 env-1046 AAGUUACA
 env-1052 UUACAAAA
 env-1053 AAGUUACA
 Psp-2-1 AAGUUACA
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 env-1056 AAGUUACA
 env-1058 UUACAAGA
 env-1059 AGUUACAA
 env-1060 AGUUACAA
 env-1061 UCAAGAAA
 Psp-13-1 UCAAGAAA
 env-1062 UCAAGAAA
 Psp-17-1 GUGAAGAA
 env-1063 GUGAAGAA
 Psp-15-1 UCAAGAAA
 Psp-16-1 GUGAAGAA
 env-1064 UGGAAGAA
 env-1065
 env-1066 UGGAAAGA
 env-1067 ACAAGACU
 Hse-1-1 CAUCAAGG
 env-1068 UAAAUUA
 env-1069 AACAAUUC
 env-1071 AUAUUUAA
 env-1072 UCGGAUGC
 env-1074 UCGGAUGC
 env-1075 UCGGAUGC
 env-1076
 env-1077 GAUUUUUU
 env-1078 GUUAGACC
 env-1079 GACCUCGG
 env-1080 GUUAGACC
 env-1081
 env-1083 AGUUAGAC
 env-1084 AAGAGUAU
 env-1085 AGAGAGUA
 env-1086
 env-1087
 env-1088
 env-1089
 env-1090
 env-1091
 env-1092 AUUUUUUU
 env-1093 GAGAGAAA
 env-1094 AGACCCUG
 env-1095 GAGUUAGA
 env-1096 GCCUGGGA
 env-1097 AGAACAAA
 env-1098 AUGUGGGU
 Psp-7-1 UGUGAGUU
 env-1099 UUUUUUUU
 env-1100 UUUUUUUU
 Psp-11-1 GACCCUGG
 Psp-19-1 AGACCCUG
 env-1101
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 env-1103 UUGAAUUU
 env-1104 CUUUUAGU
 Pbr-1-1 UUAAGUUA
 Pbr-2-1 UUAAGUUA
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 env-1107
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 env-1110 UGCGGGUG
 env-1111 GCGGGUGG
 env-1112 UAAGUUAC
 env-1113 AAUUUUCG
 env-1114 UGAUAAAA
 env-1115 UGAUAAAA
 env-1116 UUUUAGUU
 env-1117 AUGUUUUU
 env-1118 UUACAAGA
 env-1119 UUACAAGA
 env-1120 UAAGAAUU

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env-1122 AAGAAUUA
env-1123 CGAAAUAA
env-1125 UAAGUUAC
env-1126 ACAAGACU
env-1127 ACAAGACU
env-1129 ACAUUAAG
env-1130 ACUUUUGU
env-1131 UAAUGUGA
env-1132 AGAAGACC
env-1133 UACAAGAC
env-1134 CCACAAAC
env-1135 AAAUGUGA
env-1136 CAAGACCA
env-1137 UUAGA●●●
env-1138 UUAGAAUG
env-1139 CUUAGAAU
env-1140 CUUAGAAU
env-1141 CUUAGAAU
env-1143 CUUAGAAU
env-1144 CUUAGAAU
env-1145 CUUAGAAU
env-1147 UGGACACU
env-1148 ●●GACACU
env-1149 ●●GACACU
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env-1167 ●●GACACU
env-1192 CCAUUUCU
env-1193 ●●●●GAUAC
env-1194 AUGGAUAC
Psp-1-1 ●●●●GAUAC
env-1195 .....
env-1197 ●●●●GAUAC
env-1203 ●●●●GAUAC
env-1205 ●●●●GAUAC
env-1206 ●●●●GAUAC
env-1211 .....
env-1213 ●●●●GAUAC
env-1216 UGGAUACU
env-1223 UGGAUACU
env-1224 UGGAUACU
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env-1233 UGGAUACU
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env-1245 ●●●●GAUAC
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env-1251 ●●●●GAUAC
env-1254 ●●●●GAUAC
env-1256 AUGGAUAC
env-1258 ●●●●GAUAC
env-1259 AUGGAUAC
Pmu-2-1 GUCAACAG
Pde-1-1 GUAUCAAG
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4 eL15-Euryarchaeota

4.1 Taxa

The taxonomy of each organism containing a putative eL15-Euryarchaeota RNA is listed, with abbreviations identifying each hit (e.g., “Eco-1-1” and “Eco-1-2” might hypothetically represent two distinct RNAs in *E. coli*). The abbreviations will be used to identify each individual eL15-Euryarchaeota RNA in Sections 4.2 and 4.4:.

abbrev. of hits

taxonomy of species

har-1-1	halophilic archaeon DL31	Archaea
ume-1-1	Archaea Euryarchaeota	environmental samples uncultured methanogenic archaeon RC-I
h3A-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales haloarchaeon 3A1_DGR
Hsa-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Haloarculaceae <i>Halapricum salinum</i>
Hsp-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Haloarculaceae <i>Haloarcula sp.</i> CBA1115
CHa-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Candidatus Halobonum tyrrellensis</i> G22
Hci-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haladaptatus cibarius</i> D43
Hpa-1-1 to Hpa-1-2	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haladaptatus paucihalophilus</i> DX253
Hje-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halalkalicoccus jeotgali</i> B3
Hsu-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halanaeroarchaeum sulfurreducens</i>
Hac-1-1 to Hac-1-2	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halarchaeum acidiphilum</i> MH1-52-1
Ham-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloarcula amylolytica</i> JCM 13557
Har-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloarcula argentinensis</i> DSM 12282
Hca-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloarcula californiae</i> ATCC 33799
Hhi-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloarcula hispanica</i> ATCC 33960
Hhi-2-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloarcula hispanica</i> N601
Hja-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloarcula japonica</i> DSM 6131
Hma-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloarcula marismortui</i> ATCC 43049
Hsa-2-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloarcula salaria</i>
Hsi-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloarcula sinaiensis</i> ATCC 33800
Hva-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloarcula vallismortui</i> ATCC 29715
Hsa-3-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halobacterium salinarum</i> R1
Hsp-2-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halobacterium sp.</i> DL1
Hsp-3-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halobacterium sp.</i> NRC-1
Hla-1-1 to Hla-1-2	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halobiforma lacisalsi</i> AJ5
Hni-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halobiforma nitratireducens</i> JCM 10879
Hha-1-1 to Hha-1-2	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halococcus hamelinensis</i> 100A6
Hmo-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halococcus morrhuae</i> DSM 1307
Hsa-4-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halococcus saccharolyticus</i> DSM 5350
Hsa-5-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halococcus salifodinae</i> DSM 8989
Hth-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halococcus thailandensis</i> JCM 13552
Hal-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax alexandrinus</i> JCM 10717
Hde-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax denitrificans</i> ATCC 35960
Hel-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax elongans</i> ATCC BAA-1513
Hgi-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax gibbonsii</i> ATCC 33959
Hla-2-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax larsenii</i> JCM 13917
Hlu-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax lucentense</i> DSM 14919
Hme-1-1 to Hme-1-2	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax mediterranei</i> ATCC 33500
Hmu-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax mucosum</i> ATCC BAA-1512
Hpr-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax prahovense</i> DSM 18310
Hsp-4-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax sp.</i> ATCC BAA-644
Hsp-5-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax sp.</i> ATCC BAA-645
Hsp-6-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax sp.</i> ATCC BAA-646
Hsp-7-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax sp.</i> BAB2207
Hsu-2-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax sulfurifontis</i> ATCC BAA-897
Hvo-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloferax volcanii</i> DS2
Hbo-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halogeometricum borinquense</i> DSM 11551
Hsa-6-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halogranum salarium</i> B-1
Hka-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halomicrobium katesii</i> DSM 19301
Hmu-2-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halomicrobium mukohataei</i> DSM 12286
Hxa-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halopiger xanaduensis</i> SH-6
Hwa-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloquadratum walsbyi</i> C23
Hwa-2-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Haloquadratum walsbyi</i> DSM 16790
Hti-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halorhabdus tiamatea</i> SARL4B
Hut-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halorhabdus utahensis</i> DSM 12940
Hai-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halorubrum aidingense</i> JCM 13560
Har-2-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halorubrum arcis</i> JCM 13916
Hca-2-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halorubrum californiense</i> DSM 19288
Hco-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halorubrum coriense</i> DSM 10284
Hdi-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halorubrum distributum</i> JCM 10118
Hdi-2-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halorubrum distributum</i> JCM 9100
Hho-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halorubrum hochstenium</i> ATCC 700873
Hko-1-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halorubrum kocurii</i> JCM 14978
Hla-3-1	Archaea Euryarchaeota	Halobacteria Halobacteriales Halobacteriaceae <i>Halorubrum lacusprofundi</i> ATCC 49239

Hli-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum lipolyticum</i> DSM 21995
Hli-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum litoreum</i> JCM 13561
Hsa-7-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum saccharovororum</i> DSM 1137
Hsp-8-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum</i> sp. T3
Hte-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum tebenquichense</i> DSM 14210
Hte-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum terrestre</i> JCM 10247
Hpa-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halosarcina pallida</i> JCM 14848
Hca-3-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halosimplex carlsbadense</i> 2-9-1
Hli-3-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloterrigena limicola</i> JCM 13563
Hsa-8-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloterrigena salina</i> JCM 13891
Hth-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloterrigena thermotolerans</i> DSM 11522
Htu-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloterrigena turkmenica</i> DSM 5511
Has-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halovivax asiaticus</i> JCM 14624
Nae-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba aegyptia</i> DSM 13077
Nas-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba asiatica</i> DSM 12278
Nch-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba chahannaensis</i> JCM 10990
Nhu-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba hulunbeirensis</i> JCM 10989
Nma-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba magadii</i> ATCC 43099
Nta-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba taiwanensis</i> DSM 12281
Nal-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema altunense</i> JCM 12890
Nga-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema gari</i> JCM 14663
Npa-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema pallidum</i> DSM 3751
Npe-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema pellirubrum</i> DSM 15624
Nsp-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema</i> sp. J7-2
Nve-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema versiforme</i> JCM 10478
Ngr-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronobacterium gregoryi</i> SP2
Nam-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronococcus amylolyticus</i> DSM 10524
Nje-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronococcus jeotgali</i> DSM 18795
Noc-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronococcus occultus</i> SP4
Nin-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronolimnobius innermongolicus</i> JCM 12255
Nmo-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronomonas moolapensis</i> 8.8.11
Nph-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronomonas pharaonis</i> DSM 2160
Nba-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronorubrum bangense</i> JCM 10635
Nsu-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronorubrum sulfidifaciens</i> JCM 14089
Nti-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronorubrum tibetense</i> GA33
Ssp-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Salinarchaeum</i> sp. Harcht-Bsk1
Hag-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halococcaceae	<i>Halococcus agarilyticus</i>
Hse-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halococcaceae	<i>Halococcus sediminicola</i>
Hru-1-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Halobellus rufus</i>
Hal-2-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloferax alexandrinus</i>
Hgi-2-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloferax gibbonsii</i>
Hme-1-1 to Hme-1-2	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloferax mediterranei</i> ATCC 33500
Hsp-9-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloferax</i> sp. ATB1
Hna-1-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloplanus natans</i> DSM 17983
Hru-2-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halolamina rubra</i>
Hez-1-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halorubrum ezzemoulense</i> DSM 17463
Hha-2-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halorubrum halophilum</i>
Hsa-9-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halorubrum saccharovororum</i>
Hsp-10-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halorubrum</i> sp. BV1
Hdj-1-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halopiger djelfmassiliensis</i>
Hgo-1-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halopiger golemassiliensis</i>
Hsa-10-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halopiger salifodinae</i>
Hla-4-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halostagnicola larsenii</i> XH-48
Hsp-11-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halostagnicola</i> sp. A56
Hje-2-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Haloterrigena jeotgali</i> A29
Nal-2-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Natrinema altunense</i>
Nsp-2-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Natrinema</i> sp. J7-1
Mar-1-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobacterium arcticum</i>
Mfo-1-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobacterium formicicum</i>
Mfo-2-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobacterium formicicum</i> DSM 3637
Msp-1-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobacterium</i> sp. AL-21
Msp-2-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobacterium</i> sp. MB1
Msp-3-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobacterium</i> sp. SMA-27
Msp-4-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobacterium</i> sp. SWAN-1
Mve-1-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobacterium veterum</i>

Mor-1-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter oralis</i> JMR01
Msm-1-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i>
Msm-2-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> ATCC 35061
Msm-3-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> DSM 2374
Msm-4-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> DSM 2375
Msm-5-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS145A
Msm-6-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS145B
Msm-7-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS146A
Msm-8-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS146B
Msm-9-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS146C
Msm-10-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS146E
Msm-11-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS147A
Msm-12-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS147B
Msm-13-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS147C
Msm-14-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS94A
Msm-15-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS94B
Msm-16-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS94C
Msm-17-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS95A
Msm-18-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS95B
Msm-19-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS95C
Msm-20-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS95D
Msm-21-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS96A
Msm-22-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS96B
Msm-23-1	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	<i>Methanobrevibacter smithii</i> TS96C
Mae-1-1	Archaea	Euryarchaeota	Methanococci	Methanococcales	Methanococcaceae	<i>Methanococcus aeolicus</i> Nankai-3
Mvo-1-1	Archaea	Euryarchaeota	Methanococci	Methanococcales	Methanococcaceae	<i>Methanococcus voltae</i> A3
Mco-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanocellales	Methanocellaceae	<i>Methanocella conradii</i> HZ254
CMe-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Generaincertae sedis	<i>Candidatus Methanoregula boonei</i> 6A8
Mpa-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Generaincertae sedis	<i>Methanosphaerula palustris</i> E1-9c
Mma-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoculleus marisnigri</i> JR1
Mse-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoculleus sediminis</i>
Msp-5-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoculleus</i> sp. MH98A
Mli-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanofollis liminatans</i> DSM 4140
Mta-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanoregulaceae	<i>Methanolinea tarda</i> NOBI-1
Mhu-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanospirillaceae	<i>Methanospirillum hungatei</i> JF-1
CMe-2-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Candidatus Methanoperedenaceae	<i>Candidatus Methanoperedens nitroreducens</i>
Mbu-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanococcoides burtonii</i> DSM 6242
Mme-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanococcoides methylutens</i>
Mme-2-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanococcoides methylutens</i> MM1
Mev-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanolobium evestigatum</i> Z-7303
Mma-2-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanolobium mahii</i> DSM 5219
Mps-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanolobium psychrophilum</i> R15
Mti-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanolobium tindarius</i> DSM 2278
Mho-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanomethylovorans hollandica</i> DSM 15978
Mzh-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosalsum zhilinae</i> DSM 4017
Mac-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina acetivorans</i> C2A
Mba-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina barkeri</i> 227
Mba-2-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina barkeri</i> 3
Mba-3-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina barkeri</i> CM1
Mba-4-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina barkeri</i> MS
Mba-5-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina barkeri</i> str. Fusaro
Mba-6-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina barkeri</i> str. Wiesmoor
Mho-2-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina horonobensis</i> HB-1 = JCM 15518
Mla-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina lacustris</i> Z-7289
Mma-3-1 to Mma-3-56	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina mazei</i>
Mma-4-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina mazei</i> C16
Mma-5-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina mazei</i> Go1
Mma-6-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina mazei</i> LYC
Mma-7-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina mazei</i> S-6
Mma-8-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina mazei</i> SarPi
Mma-9-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina mazei</i> WWM610
Msi-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina siciliae</i> C2J
Msi-2-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina siciliae</i> T4/M
Mso-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina soligelidi</i>
Msp-6-1	Archaea	Euryarchaeota	Methanomicrobia	Methanosarcinales	Methanosarcinaceae	<i>Methanosarcina</i> sp. 1.H.A.2.2

Hwa-1-1	NC_017459.1	+	520849	520904	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → ThiF_MoeB_HesA_family (cd00757)adenylthiF (TIGR02356) → PRK08762 (PRK08762)ThiF_MoeB_HesA_family (cd00757) →
env-23	APHM01021410.1	+	37065	37122	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK08762 (PRK08762)ThiF_MoeB_HesA_family (cd00757) →
env-24	LTJ07As871_J07ABscf098855	+	941476	941533	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-25	APHM01021802.1	+	241797	241852	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → ThiF_MoeB_HesA_family (cd00757)adenylthiF (TIGR02356) →
env-26	LTJ07As871_J07ABscf098874	+	856037	856092	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → ThiF_MoeB_HesA_family (cd00757)adenylthiF (TIGR02356) →
env-27	JXWS01023088.1	-	1497	1442	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → ThiF_MoeB_HesA_family (cd00757)adenylthiF (TIGR02356) →
env-28	P_A23_Liq_2_Fmt_1049687	+	77	131	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-29	P_A23_Liq_1_Fmt_1040915	-	222	168	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-30	P_A23_Liq_3_Fmt_1034622	+	56	110	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-31	GSLNARP_GFPJP1N02JOWUN	+	62	117	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Hru-1-1	NZ_BBJO01000020.1	+	43857	43911	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-32	JXWS01113690.1	+	469	523	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-33	GSLNARP_GGGT6729_b1	+	216	270	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Hpa-2-1	NZ_AOIV01000027.1	-	154749	154689	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-34	GSLNAS_contig09763	+	194	284	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-35	SL_5KL_010_BRINE_10000873	+	7980	8030	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-36	SL_6KL_011_BRINE_1000559	+	8034	8084	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-37	SL_4KL_010_BRINE_10001420	-	8559	8509	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-38	SL_7KL_010_BRINE_10000923	-	9479	9429	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-39	GSLNARP_contig11045	+	688	814	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-40	APHM01004060.1	-	1754	1627	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-41	LTJ07As871_J07ABscf087768	+	8333	8460	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hac-1-1	NZ_BATA01000010.1	-	40529	40466	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hac-1-2	NZ_BANO01000201.1	+	3030	3093	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-42	JXWS01007612.1	+	354	427	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-43	P_A23_Liq_1_Fmt_1012496	+	495	568	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-44	P_A23_Liq_3_Fmt_1032483	-	283	210	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-45	P_1C_Liq_3_UnCty_1034822	+	91	164	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-46	P_1C_Liq_1_UnCty_1087024	-	228	155	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hna-1-1	NZ_KE386573.1	+	519442	519497	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-47	P_1C_Sed_2_UnCty_1011141	+	185	240	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-48	GSLSAAL_contig05270	+	171	218	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK08762 (PRK08762)ThiF_MoeB_HesA_family (cd00757) →
env-49	GSLSAAL_contig13583	-	272	225	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-50	GSLSAAL_contig05339	-	621	574	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-51	GSLSAAL_contig11105	+	1628	1675	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK08762 (PRK08762)ThiF_MoeB_HesA_family (cd00757) →
env-52	GSLSAAL_contig11811	-	21562	21515	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK08762 (PRK08762)ThiF_MoeB_HesA_family (cd00757) → PRK05399 (PRK05399)MutS_I (pfam01624) → MUTSd (smart00533)MutS (COG0249) → MUTSac (smart00534)MutS (COG0249) →
env-53	PR_CR_10_Liq_1.inCR_1003279	-	5806	5759	HATPase_c (smart00387)HATPase_c (cd00075) → DNA_mis_repair (pfam01119)MutL_C (pfam08676) → RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK08762 (PRK08762)ThiF_MoeB_HesA_family (cd00757) → MUTSac (smart00534)MUTSd (smart00533)MutS (COG0249) → MutL (COG0323)mutL (PRK00095) →
env-54	PR_CR_10_Liq_3.inCR_1104247	-	209	162	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-55	SL_6KL_011_BRINE_1017367	+	1682	1774	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-56	SL_4KL_010_BRINE_10011168	-	1073	981	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-57	SL_6KL_011_BRINE_1001181	-	10407	10313	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →

env-58	SL_5KL_010_SED_10002058	-	10404	10310	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-59	SL_8KL_010_SED_10019608	+	2296	2390	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-60	SL_4KL_010_BRINE_10010798	-	3106	3012	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-61	SL_6KL_011_BRINE_10003334	+	4498	4594	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-62	SL_8KL_010_SED_10044433	-	1782	1686	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-63	SL_6KL_011_BRINE_1254331	+	116	210	RNA →
env-64	SL_5KL_010_BRINE_10001910	-	7669	7575	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-65	SL_4KL_010_BRINE_10067600	-	209	106	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-66	SL_6KL_011_BRINE_1036440	-	1105	1005	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hai-1-1	NZ_AOJI01000011.1	+	21092	21169	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hco-1-1	NZ_AOJL01000012.1	+	32123	32204	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsp-8-1	NZ_JH815329.1	+	137323	137405	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hte-1-1	NZ_AOJD01000051.1	+	33749	33831	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hho-1-1	NZ_AOJO01000019.1	-	62900	62818	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-67	P_1C_Liq_3_UnCty_1013660	-	413	331	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-68	P_1C_Liq_1_UnCty_1013722	-	796	714	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-69	P_1C_Liq_2_UnCty_1006954	-	774	692	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hca-2-1	NZ_AOJK01000041.1	+	102530	102612	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-70	P_A23_Liq_1_Fmt_1003600	-	1435	1353	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-71	P_A23_Liq_3_Fmt_1003343	+	1237	1319	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-72	P_A23_Liq_2_Fmt_1003882	-	1692	1610	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hez-1-1	NZ_ATXS01000005.1	+	87176	87258	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hli-2-1	NZ_AOJF01000031.1	-	113040	112960	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Har-2-1	NZ_AOJJ01000054.1	-	111488	111408	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hdi-1-1	NZ_AOJN01000039.1	-	113054	112974	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hte-2-1	NZ_AOIW01000042.1	-	36897	36817	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hdi-2-1	NZ_AOJM01000058.1	-	27117	27037	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-73	P_1C_Liq_1_UnCty_1078077	-	117	36	RNA → hypo →
Hli-1-1	NZ_AOJG01000017.1	-	108989	108896	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hha-2-1	NZ_BBJP01000018.1	+	13726	13819	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsa-9-1	NZ_JNFH02000023.1	+	21503	21596	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-74	ADL20m3uS_contig07384	+	1833	1926	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-75	2140918017-2486	+	2582	2675	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-76	2140918027-05980	-	1029	936	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hla-3-1	NC_012029.1	+	432908	433001	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hko-1-1	NZ_AOJH01000069.1	+	3726	3819	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-77	GQKUMWE01AOE6H	-	136	43	RNA → hypo →
env-78	GQKUMWE02FUCCT	+	205	298	RNA → hypo →
Hsa-7-1	NZ_AOJE01000060.1	+	111633	111732	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-79	P_1C_Liq_2_UnCty_1069180	-	260	182	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-80	P_A23_Liq_1_Fmt_1002719	-	2388	2327	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-81	P_A23_Liq_3_Fmt_1003378	-	2423	2362	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-82	P_A23_Liq_2_Fmt_1009559	-	879	818	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-83	P_1C_Sed_2_UnCty_1017312	+	398	479	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-84	P_1C_Liq_1_UnCty_1034993	+	194	275	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-85	P_1C_Liq_2_UnCty_1023529	-	401	320	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-86	P_1C_Liq_3_UnCty_1021498	-	346	265	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-87	P_1C_Sed_2_UnCty_1004595	+	1788	1869	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-88	P_1C_Sed_2_UnCty_1006549	+	274	355	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-89	SL_6KL_011_BRINE_1064466	-	575	484	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-90	SL_6KL_011_BRINE_1008323	-	510	419	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-91	SL_6KL_011_BRINE_1063445	+	299	393	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →

env-92	SL_6KL.011_BRINE_1001542	-	7921	7827	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-93	SL_6KL.011_BRINE_1006605	+	4992	5093	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-94	SL_6KL.011_BRINE_1010435	-	890	821	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hmu-1-1	NZ_AOLN01000018.1	+	760151	760214	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hel-1-1	NZ_AOLK01000011.1	-	499306	499243	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hla-2-1	NZ_AOLI01000030.1	-	9206	9143	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hde-1-1	NZ_AOLP01000017.1	+	194706	194766	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hal-2-1	NZ_LK053000.1	-	1797714	1797654	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hpr-1-1	NZ_AOLG01000009.1	-	95328	95268	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hgi-1-1	NZ_AOLJ01000011.1	+	406353	406413	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hgi-2-1	NZ_CP011947.1	-	470623	470563	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsp-9-1	NZ_JPES01000007.1	-	10173	10113	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsu-2-1	NZ_AOLM01000018.1	+	49470	49530	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsp-6-1	NZ_AOLD01000031.1	+	8987	9047	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsp-4-1	NZ_AOLF01000036.1	-	67323	67263	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsp-5-1	NZ_AOLE01000023.1	+	9123	9183	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hme-1-1	NZ_AOLO01000007.1	+	387185	387264	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hme-1-2	NC_017941.2	-	494773	494694	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hru-2-1	NZ_BBJN01000010.1	-	27162	27075	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-95	P_A23.Liq_1.Fmt_1000360	+	2899	2970	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-96	P_A23.Liq_3.Fmt_1000054	+	17691	17762	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-97	P_A23.Liq_2.Fmt_1000005	+	59053	59124	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-98	JXWS01130832.1	-	481	414	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-99	APHM01022051.1	+	3638	3699	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-100	LTJ07As871_J07ABscf098878	+	1502510	1502571	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
CHa-1-1	NZ_ASGZ01000052.1	+	24839	24927	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → GlcE (TIGR03520)DUF21 (pfam01595) →
env-101	SL_4KL.010_BRINE_10493865	-	158	111	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-102	SL_6KL.011_BRINE_1000129	+	15997	16046	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-103	SL_4KL.010_BRINE_10001303	+	2439	2488	PRK08762 (PRK08762)ThiF_MoeB_HesA_family (cd00757) → NikR (COG0864)NikR_C (pfam08753) → RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-104	SL_4KL.010_BRINE_10001201	+	2902	2951	PRK08762 (PRK08762)ThiF_MoeB_HesA_family (cd00757) → NikR (COG0864)NikR_C (pfam08753) → RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-105	SL_5KL.010_BRINE_10000041	+	10173	10222	ThiF_MoeB_HesA_family (cd00757)adenyl_thiF (TIGR02356) → NikR (COG0864)NikR_C (pfam08753) → RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-106	SL_6KL.011_BRINE_1002627	-	6475	6426	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-107	SL_5KL.010_SED_10011446	+	130	179	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-108	SL_8KL.010_SED_10489198	-	248	199	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-109	SL_4KL.010_BRINE_10000898	+	3047	3096	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-110	SL_6KL.011_BRINE_1001896	-	92	43	RNA → ← hypo
env-111	SL_4KL.010_BRINE_10030276	+	2918	2967	RNA → hypo →
env-112	P_1C.Liq_3.UnCty_1038130	-	250	201	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-113	P_1C.Liq_2.UnCty_1042794	+	154	203	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-114	P_1C.Liq_1.UnCty_1078870	+	144	193	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-115	P_A23.Liq_3.Fmt_1006374	-	68	19	RNA →
env-116	JXWS01040251.1	+	738	787	RNA →
env-117	P_A23.Liq_3.Fmt_1005856	+	1663	1712	RNA →
env-118	P_A23.Liq_2.Fmt_1003095	-	2041	1992	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-119	APHM01020319.1	-	3958	3909	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-120	LTJ07As871_J07ABscf098871	+	227603	227652	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-121	P_A23.Liq_1.Fmt_1002579	-	586	537	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-122	P_A23.Liq_1.Fmt_1006552	-	756	707	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-123	P_A23.Liq_2.Fmt_1001062	+	420	469	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-124	GSLNARP_contig28426	+	697	746	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →

env-125	P_A23.Liq_3.Fmt_1000673	-	2025	1976	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-126	ADL20m3uS_contig11627	+	9912	9962	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-127	ADL5mRS1u_contig00042	-	12742	12692	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-128	2140918027-00046	-	29012	28962	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-129	P_1C_Sed_2_UnCty_1108461	+	263	312	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-130	ADL20m3uS_contig09914	+	12790	12839	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-131	ADL5mRS1u_contig00058	-	5253	5204	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-132	2140918017-271	-	51697	51648	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-133	2140918017-8071	-	5288	5239	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-134	2140918027-00195	-	5210	5161	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-135	SL_4KL_010_BRINE_10074326	-	160	113	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-136	SL_6KL_011_BRINE_1020994	-	164	117	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-137	SL_6KL_011_BRINE_1123850	+	243	291	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-138	SL_8KL_010_SED_10020664	-	519	471	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-139	SL_8KL_010_SED_10132433	-	343	294	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-140	SL_5KL_010_SED_10120051	+	387	435	RNA →
env-141	SL_5KL_010_BRINE_10075440	-	64	16	RNA → hypo →
env-142	SL_5KL_010_SED_10001678	-	13040	12992	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → MCP_signal (cd11386)MA (smart00283)PRK10935 (PRK10935)HAMP (pfam00672) → ThiF_MoeB_HesA_family (cd00757)adenyl_thiF (TIGR02356) → PRK04460 (PRK04460)ParD (COG3609) → TIGR00697 (TIGR00697)Vut_1 (pfam02592) →
env-143	SL_7KL_010_BRINE_10383585	+	15	63	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-144	SL_5KL_010_SED_10002997	-	7066	7018	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → MA (smart00283)Tar (COG0840)PRK10935 (PRK10935)HAMP (pfam00672) → ThiF_MoeB_HesA_family (cd00757)adenyl_thiF (TIGR02356) → PRK04460 (PRK04460)ParD (COG3609) → TIGR00697 (TIGR00697)Vut_1 (pfam02592) → YhaK (COG1741) →
env-145	SL_5KL_010_BRINE_10088461	+	207	254	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-146	SL_6KL_011_BRINE_1001921	-	5758	5709	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → MA (smart00283)Tar (COG0840)HAMP (pfam00672) → ThiF_MoeB_HesA_family (cd00757)adenyl_thiF (TIGR02356) → PRK04460 (PRK04460)ParD (COG3609) → TIGR00697 (TIGR00697)Vut_1 (pfam02592) → YhaK (COG1741) →
env-147	SL_6KL_011_BRINE_1002375	-	67	20	RNA →
env-148	SL_4KL_010_BRINE_10002475	+	10303	10350	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-149	SL_5KL_010_BRINE_10000147	-	15060	15012	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → MA (smart00283)Tar (COG0840)HAMP (pfam00672) → ThiF_MoeB_HesA_family (cd00757)adenyl_thiF (TIGR02356) → PRK04460 (PRK04460)ParD (COG3609) → TIGR00697 (TIGR00697)Vut_1 (pfam02592) →
env-150	SL_6KL_011_BRINE_1000125	+	13899	13947	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → MA (smart00283)Tar (COG0840)HAMP (pfam00672) → ThiF_MoeB_HesA_family (cd00757)adenyl_thiF (TIGR02356) → PRK04460 (PRK04460)ParD (COG3609) → TIGR00697 (TIGR00697)Vut_1 (pfam02592) →
env-151	SL_4KL_010_BRINE_10000557	+	10772	10820	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → MA (smart00283)Tar (COG0840)HAMP (pfam00672) → ThiF_MoeB_HesA_family (cd00757)adenyl_thiF (TIGR02356) → PRK04460 (PRK04460)ParD (COG3609) → TIGR00697 (TIGR00697)Vut_1 (pfam02592) →
env-152	SL_4KL_010_BRINE_10273491	-	277	229	RNA → ← hypo
env-153	P_A23.Liq_1.Fmt_1052201	-	109	60	RNA → hypo →
env-154	P_A23.Liq_3.Fmt_1050467	+	211	260	RNA → hypo →
env-155	P_A23.Liq_2.Fmt_1033762	+	198	247	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-156	APHM01021601.1	-	2022	1973	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-157	LTJ07As871_J07ABscf098869	-	39692	39643	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-158	JXWU01132649.1	-	361	312	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-159	SL_4KL_010_BRINE_10652442	-	116	67	RNA →
Hsp-10-1	NZ_KN050825.1	+	204974	205055	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →

Hse-1-1	NZ_BBMP01000007.1	-	359177	359090	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → DsbA_FrnE (cd03024)Thioredoxin_4 (pfam13462) →
Hmo-1-1	NZ_AOMC01000142.1	-	76777	76718	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → DsbA_FrnE (cd03024)Thioredoxin_4 (pfam13462) →
Hth-1-1	NZ_AOMF01000174.1	-	199637	199578	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nae-1-1	NZ_AOIP01000031.1	+	430123	430196	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nta-1-1	NZ_AOIL01000013.1	+	203216	203289	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nas-1-1	NZ_AOIO01000020.1	-	6198	6125	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-160	GSLNAS_F7I09SK02JROTM	-	174	92	RNA → ←-hypo
env-161	GSLNARP_GFPJP1N02H548U	+	202	278	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-162	SL_8KL_010_SED_10010026	+	6182	6238	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-163	SL_4KL_010_BRINE_10000926	+	6176	6232	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-164	SL_5KL_010_BRINE_10000029	+	1081	1137	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-165	SL_6KL_011_BRINE_1183487	+	36	92	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-166	SL_5KL_010_SED_10001187	-	8518	8462	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-167	SL_4KL_010_BRINE_10007163	+	5927	5983	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-168	SL_4KL_010_BRINE_10050687	-	1683	1627	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-169	SL_8KL_010_SED_10059739	-	1479	1423	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-170	SL_5KL_010_BRINE_10000179	+	3935	3995	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-171	SL_6KL_011_BRINE_1206958	-	208	148	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Hla-4-1	NZ_CP007055.1	-	515819	515738	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsp-11-1	NZ_JMIP02000020.1	+	43217	43284	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsp-3-1	NC_002607.1	-	153435	153378	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsa-3-1	NC_010364.1	-	153597	153540	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-172	SL_4KL_010_BRINE_10049878	+	1656	1711	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Hsa-1-1	NZ_BBMO01000001.1	-	1407520	1407456	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-173	ADL20m3uS_GLR497S01AM9VW	-	353	303	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-174	2140918017-22757	-	213	163	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-175	GSLNAS_F7I09SK02IM9H7	+	19	70	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-176	P_1C_Sed_2_UnCty_1039923	-	750	700	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hpa-1-1	NZ_AEMG01000025.1	-	56166	56103	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hpa-1-2	NZ_AQXI01000001.1	-	2637650	2637587	PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → DUF1211 (pfam06736) → DUF1211 (pfam06736) →
env-177	SL_4KL_010_BRINE_10364003	-	267	151	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-178	SL_4KL_010_BRINE_10015962	-	1055	974	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-179	SL_4KL_010_BRINE_10475926	+	13	62	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-180	SL_4KL_010_BRINE_10013350	-	4649	4598	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-181	SL_4KL_010_BRINE_10006798	-	2037	1873	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-182	SL_4KL_010_BRINE_10145615	+	98	148	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Ssp-1-1	NC_021313.1	+	780000	780118	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-183	JXWU01070236.1	-	388	249	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nph-1-1	NC_007426.1	-	125427	125378	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-184	SL_4KL_010_BRINE_10509292	+	104	196	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Hgo-1-1	NZ_HG315690.1	-	2398586	2398507	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK15005 (PRK15005)USP_Like (cd00293) → ars_reduc_gluta (TIGR02689)LMWpC (pfam01451) →
Hxa-1-1	NC_015666.1	+	1583029	1583107	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-185	SL_4KL_010_BRINE_10004067	+	1089	1146	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK15005 (PRK15005)USP_Like (cd00293) →
env-186	SL_5KL_010_BRINE_10021750	+	302	359	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK15005 (PRK15005)USP_Like (cd00293) →
env-187	SL_8KL_010_SED_10621895	-	164	104	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Nin-1-1	NZ_AOHZ01000075.1	-	121628	121567	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-188	SL_5KL_010_BRINE_10005738	-	1188	1131	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-189	SL_6KL_011_BRINE_1053602	+	271	328	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-190	SL_8KL_010_SED_10028257	-	828	771	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →

env-191	SL_4KL_010_BRINE_10066144	-	810	753	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-192	SS_3KL_010_SOIL_10028172	-	1924	1854	RNA → ←-hypo
env-193	SL_3KL_010_SED_10125154	+	137	207	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nje-1-1	NZ_AOIA01000114.1	+	146675	146744	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nam-1-1	NZ_AOIB01000026.1	+	119391	119460	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Noc-1-1	NC_019974.1	-	1797311	1797242	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-194	GSLNARP_GFPJP1N02GQ822	+	449	495	RNA →
env-195	SL_4KL_010_BRINE_10350018	-	232	148	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-196	SL_4KL_010_BRINE_10097165	-	841	785	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-197	SL_5KL_010_BRINE_10001159	-	6520	6463	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-198	SL_5KL_010_SED_10028357	+	365	422	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-199	SL_6KL_011_BRINE_1084724	-	464	407	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-200	SL_8KL_010_SED_10260913	+	164	221	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-201	SL_4KL_010_BRINE_10003303	+	1476	1533	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-202	GSLNAS_F7I09SK02F8ECV	-	271	209	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Hla-1-1	NZ_AGFZ01000059.1	-	22715	22654	RNA → hypo → hypo → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hla-1-2	NZ_AOLZ01000073.1	-	22804	22743	RNA → hypo → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hva-1-1	NZ_AOLQ01000004.1	-	73870	73819	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsi-1-1	NZ_AOLR01000005.1	+	181787	181840	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hma-1-1	NC_006396.1	+	1849657	1849710	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Ham-1-1	NZ_AOLW01000010.1	-	93451	93398	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-203	P_A23_Liq_1_Fmt_1025305	+	182	235	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-204	P_A23_Liq_3_Fmt_1015036	-	204	151	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-205	P_A23_Liq_2_Fmt_1015236	+	488	541	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hca-1-1	NZ_AOLS01000038.1	-	57729	57676	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsa-2-1	NZ_JXAO01000004.1	+	115750	115803	RNA → hypo →
Hhi-2-1	NC_023013.1	+	2490914	2490967	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hhi-1-1	NC_015948.1	+	2479481	2479534	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsp-1-1	NZ_CP010529.1	+	1092738	1092791	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hja-1-1	NZ_AOLY01000007.1	-	129303	129250	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Har-1-1	NZ_AOLX01000025.1	-	30531	30480	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-206	GSLNAS_F7I09SK02I6FWL	+	298	351	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hmu-2-1	NC_013202.1	-	272589	272518	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hka-1-1	NZ_KB905378.1	+	614167	614238	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-207	SL_6KL_011_BRINE_1037538	-	695	635	RNA → ←-hypo
env-208	SL_6KL_011_BRINE_1012586	-	1128	1038	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-209	SL_4KL_010_BRINE_10018197	+	2238	2328	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-210	SL_6KL_011_BRINE_1090145	+	342	402	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-211	SL_4KL_010_BRINE_10055587	-	1221	1161	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-212	SL_6KL_011_BRINE_1018015	-	1651	1591	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-213	SL_4KL_010_BRINE_10006569	+	5039	5099	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-214	SL_6KL_011_BRINE_1094071	-	230	150	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-215	GSLSAALGFP0ZZ301EUXSI	+	466	528	RNA → ←-hypo
env-216	SL_4KL_010_BRINE_10104860	+	909	969	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-217	GSLNARP_contig03416	-	112	53	RNA →
env-218	GSLNAS_F7I09SK02HZKWC	-	504	445	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-219	GSLNAS_F7I09SK02GL76P	-	421	362	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-220	P_A23_Liq_1_Fmt_1037775	+	87	146	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nmo-1-1	NC_020388.1	+	780497	780546	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-221	APHM01007304.1	+	2549	2595	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK08671 (PRK08671)MetAP2 (cd01088) →
env-222	LTJ07As871_J07ABscf089578	-	54536	54490	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →

env-223	GSLNARP_contig28880	+	3300	3346	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK08671 (PRK08671)APP_MetAP (cd01060)
env-224	APHM01013436.1	+	115	161	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-225	LTJ07As871_J07ABscf098875	+	1708553	1708599	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-226	SL_4KL_010_BRINE_10204549	+	36	97	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-227	JXWU01037046.1	-	538	484	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-228	SS_3KL_010_SOIL_10003299	+	3588	3637	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-229	SS_3KL_010_SOIL_10003445	+	3378	3426	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hci-1-1	NZ_JDTH01000002.1	-	1455055	1454992	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hut-1-1	NC_013158.1	-	2429098	2429049	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-230	GSLNARP_GFPJP1N02FZ9S5	+	70	153	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-231	SL_8KL_010_SED_10278449	-	167	118	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-232	SL_4KL_010_BRINE_10001615	-	5266	5217	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-233	SL_6KL_011_BRINE_1000077	-	3468	3419	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → hypo → hypo →
env-234	SL_6KL_011_BRINE_1009755	-	3271	3210	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-235	SL_8KL_010_SED_10678060	-	174	125	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-236	SL_4KL_010_BRINE_10654803	+	125	172	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Nba-1-1	NZ_AOBY01000007.1	+	209062	209133	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-237	SL_3KL_010_SED_11113557	-	168	97	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Nsu-1-1	NZ_AOHX01000026.1	+	190456	190532	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Npa-1-1	NZ_AOII01000068.1	+	9874	9946	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nal-2-1	NZ_JNCS01000001.1	+	188067	188139	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nal-1-1	NZ_AOIK01000025.1	-	13704	13632	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nga-1-1	NZ_AOIJ01000043.1	+	26494	26566	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nsp-2-1	NZ_AJVJ01000013.1	+	23678	23750	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nsp-1-1	NC_018224.1	+	1880458	1880530	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hdj-1-1	NZ_HG315684.1	-	683477	683408	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hli-3-1	NZ_AOIT01000029.1	-	228185	228113	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hje-2-1	NZ_JDTG01000014.1	-	528274	528203	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hth-2-1	NZ_AOIR01000063.1	-	74675	74604	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsa-10-1	NZ_JROF01000002.1	+	114940	115012	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-238	SL_5KL_010_BRINE_10014771	+	1979	2040	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-239	SL_5KL_010_BRINE_10003441	+	1496	1557	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-240	SL_6KL_011_BRINE_1002462	-	7480	7419	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-241	SL_8KL_010_SED_10108063	-	214	153	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-242	SL_4KL_010_BRINE_10000366	+	1598	1659	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hni-1-1	NZ_AOMA01000119.1	+	3513	3588	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nch-1-1	NZ_AOIN01000080.1	+	5529	5592	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nhu-1-1	NZ_AOIM01000013.1	+	217184	217247	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nve-1-1	NZ_AOID01000026.1	-	208079	208007	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsa-8-1	NZ_AOIS01000035.1	+	13267	13339	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Htu-1-1	NC_013743.1	-	2869593	2869521	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-243	SL_8KL_010_SED_10556862	-	191	117	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Hca-3-1	NZ_AOIU01000004.1	+	46196	46248	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-244	JXWS01111537.1	-	180	72	RNA → ← Form_Nir_trans (pfam01226)
env-245	SL_4KL_010_BRINE_10017818	-	3866	3781	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK15005 (PRK15005)USP_Like (cd00293) →
env-246	GSLNAS_F7I09SK02G2VWW	+	218	297	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-247	SL_5KL_010_BRINE_10003121	+	300	385	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-248	SL_5KL_010_BRINE_10044475	-	707	612	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-249	SL_4KL_010_BRINE_10064659	+	812	918	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → RPL15A (COG1632)PRK04243 (PRK04243) →
env-250	GSLNARP_GFPJP1N02IRMJO	+	320	372	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-251	APHM01020421.1	+	442	499	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-252	LTJ07As871_J07ABscf098852	-	1211893	1211836	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →

env-253	GSLNARP_GFPJP1N02H78XW	+	40	86	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Hsu-1-1	NZ_CP008874.1	-	516965	516913	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsp-2-1	NZ_CP007060.1	-	692145	692080	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Has-1-1	NZ_AOIQ01000019.1	+	72263	72320	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-254	SS_3KL_010_SOIL_10043763	-	169	95	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Hag-1-1	NZ_BAFM01000013.1	+	96977	97051	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → FrnE (COG2761)Thioredoxin_4 (pfam13462) →
Hsa-4-1	NZ_AOMD01000030.1	+	286601	286667	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → hypo → hypo → FrnE (COG2761)Thioredoxin_4 (pfam13462) →
Hsa-5-1	NZ_AOME01000076.1	+	93813	93880	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → FrnE (COG2761)Thioredoxin_4 (pfam13462) →
env-255	CERQ01166877.1	-	487	436	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-256	CETH01173410.1	+	12810	12860	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PreA (COG1146)Fer4_7 (pfam12838) →
env-257	CETM01021463.1	-	36859	36809	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PreA (COG1146)Fer4_7 (pfam12838) →
env-258	CEUQ01031760.1	+	6382	6432	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PreA (COG1146)Fer4_7 (pfam12838) →
env-259	CEUS01376465.1	+	263	313	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-260	CEUY01138208.1	-	851	801	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → hypo →
env-261	CEUZ01171605.1	+	1156	1206	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-262	JCVL_SCAF_1096628214146	-	161	111	RNA →
env-263	CENY01171985.1	-	10152	10102	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PreA (COG1146)Fer4_13 (pfam13370) →
env-264	CEOQ01117861.1	+	720	770	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-265	CEUL01353856.1	+	7	57	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PreA (COG1146)Fer4_7 (pfam12838) →
env-266	CENY01152858.1	+	14934	14985	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PreA (COG1146)Fer4_9 (pfam13187) →
Mae-1-1	NC_009635.1	-	1562691	1562646	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-267	PBDCA2_FIDWTPW02QZKOZ	+	178	232	RNA → hypo → RPL15A (COG1632)PRK04243 (PRK04243) →
env-268	JGI24422J19971_10000787	-	11928	11884	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-269	JGI2172J19969_10313737	-	395	351	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-270	LGVF01069618.1	-	525	473	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-271	LGVE01065530.1	-	193	142	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-272	LGVF01108952.1	+	1406	1457	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-273	LGVF01076430.1	-	3041	2990	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-274	JGI24721J26819_10009006	+	6561	6611	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-275	JGI24721J44947_10030901	-	78	28	RNA →
env-276	JGI24721J44947_10028419	+	536	586	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-277	JGI24721J44947_10022851	+	2001	2047	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → hypo → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-278	JGI20130J15003_1001487	+	10993	11039	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-279	JGI20130J15133_1001487	+	10993	11039	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-280	JGI24721J26819_10027382	-	1728	1682	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-281	JGI2172J19969_10022280	+	1906	1952	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-282	SMTZ1_10021852	+	5904	5950	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-283	JGI20214J14112_1187723	+	274	322	RNA →
env-284	WSSedA2C_c189965	+	176	224	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-285	WSSedA2Ca3_1189965	+	176	224	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-286	WSSedB1B2_c027137	-	242	194	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-287	JGI24721J26819_10037939	+	1348	1398	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) →

env-288	JGI24721J44947_10000270	-	47013	46963	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) →
env-289	JGI2160J19893_10105365	-	280	230	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-290	JGI2171J19970_10224488	+	281	331	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-291	JGI2173J19968_10055779	+	876	926	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-292	SMTZ1_10000331	-	33118	33068	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-293	JGI2171J19970_10312620	+	332	382	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-294	SMTZ1_10014562	-	4684	4634	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-295	WSSedA1TJGL_c051973	+	58	106	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-296	WSSedA1Ba3_1047821	-	762	714	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → hypo →
env-297	JGI20171J14444_1002001	+	1726	1771	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-298	JGI20165J15291_1047466	-	228	183	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-299	JGI20164J15296_1001389	+	654	699	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-300	JGI20163J15578_10000609	-	5418	5373	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-301	JGI20164J15296_1023034	-	338	292	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-302	JGI20164J15296_1001061	+	1474	1520	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-303	JGI20164J15296_1003383	-	130	84	RNA →
env-304	WSSedA2C_c120722	-	217	169	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-305	WSSedA1Ba2_1101229	-	82	34	RNA → hypo →
env-306	WSSedA1Ba3_1039983	-	339	291	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-307	WSSedA2Ca3_1120722	-	217	169	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-308	JREQ01002797.1	+	594	639	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-309	JREQ01001068.1	+	594	639	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → RPL15A (COG1632)PRK04243 (PRK04243) →
env-310	JREQ01004635.1	-	265	221	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-311	JGI24422J19971_10442158	+	33	79	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-312	JGI2172J19969_10165153	+	155	200	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-313	JGI2173J19968_10019714	-	204	159	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-314	JGI2171J19970_10593475	+	159	204	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-315	JGI24422J19971_10429142	-	262	217	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-316	SMTZ1_10013484	-	9454	9409	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-317	JGI2172J19969_10374243	-	221	175	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-318	JGI2173J19968_10119450	-	690	644	RNA → hypo → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-319	JGI2171J19970_10117997	-	822	776	RNA → hypo → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RNA_binding (pfam01877) →
env-320	SMTZ1_10010538	-	5263	5217	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-321	TB.LI09_3_1376570	+	4	50	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-322	LGVD01087542.1	-	817	771	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → RPL15A (COG1632)PRK04243 (PRK04243) → RNA_binding (pfam01877) →
env-323	JGI24024J18818_10296176	-	207	161	RNA → hypo →
env-324	SMTZ1_10000031	+	24101	24147	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-325	JGI2173J19968_10468069	-	221	175	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-326	LGVF01282102.1	-	355	309	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-327	LGVE01222292.1	-	389	343	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-328	LGOV01067113.1	+	3689	3735	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → POP5 (COG1369) →

Pab-1-1	NC.000868.1	+	818641	818684	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → hydrog_prot (TIGR00072)H2MP_MemB-H2evol (cd06067) →
Psp-2-1	NC.017946.1	-	888644	888600	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Tga-1-1	NC.012804.1	+	1735891	1735934	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Tsp-3-1	NC.018015.1	-	513605	513561	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Tsp-2-1	NC.016051.1	-	1259118	1259075	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Tna-1-1	NZ_CP007264.1	+	1944164	1944207	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Teu-1-1	NZ_CP008887.1	+	1002663	1002706	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-329	3300001592.11448690	+	60	103	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Tsp-4-1	NZ_KE387149.1	+	630216	630259	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Tsi-1-1	NC.012883.1	+	1077704	1077747	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Tli-1-1	NC.022084.1	+	51943	51986	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-330	JGI24019J35510.1000020	-	119249	119205	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Tba-1-1	NC.014804.1	+	122047	122091	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Tpa-1-1	NZ_CP006965.1	+	229409	229452	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Ppa-1-1	NZ_CP006019.1	+	356037	356081	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) PRK03892 (PRK03892)RPP1 (COG1603) → PRK03717 (PRK03717)POP5 (COG1369) → TIGR00341 (TIGR00341)DUF389 (pfam04087) →
Pfu-2-1	NC.003413.1	-	849639	849596	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Pfu-1-1	NC.018092.1	-	651734	651691	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Pho-1-1	NC.000961.1	+	891553	891596	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → hydrog_prot (TIGR00072)H2MP_MemB-H2evol (cd06067) →
Psp-1-1	NC.015474.1	+	1545307	1545351	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → hydrog_prot (TIGR00072)H2MP_MemB-H2evol (cd06067) →
Pya-1-1	NC.015680.1	+	224726	224769	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Tko-1-1	NC.006624.1	-	1280545	1280502	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Tsp-1-1	NC.015865.1	-	869933	869890	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Pfe-1-1	NZ_LANF01000010.1	-	104355	104312	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Ton-1-1	NC.011529.1	+	120097	120140	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) PRK03892 (PRK03892)RPP1 (COG1603) →
Tzi-1-1	NZ_AJLF01000001.1	-	197475	197432	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-331	JGI24721J44947.10092924	+	379	432	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-332	JGI24721J26819.10019109	+	3371	3424	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-333	JGI24422J19971.10125801	-	282	234	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-334	JGI24721J26819.10947299	+	173	218	RNA →
env-335	JGI24721J44947.10473589	-	321	276	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-336	JGI24721J26819.10001491	+	21482	21529	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-337	JGI24721J44947.10032959	-	4920	4873	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-338	TB_LI09_3.1044718	+	801	846	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-339	JGI24721J26819.10004799	-	3984	3939	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-340	JGI24721J44947.10004827	-	9632	9587	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-341	JGI20130J15003.1091000	+	354	398	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-342	JGI20130J15133.1091000	+	354	398	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →

env-343	JGI24721J44947_10014353	-	2950	2906	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-344	JGI20130J15003_1005034	+	5585	5630	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-345	JGI20130J15133_1005034	+	5585	5630	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-346	JGI24721J26819_10047889	-	1496	1451	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → Acyl-CoA_dh_N (pfam02771) →
env-347	JGI24721J44947_10203480	+	445	490	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-348	JREQ01006527.1	-	305	258	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-349	JGI2172J19969_10000042	-	4265	4219	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-350	JGI2173J19968_10000091	+	26877	26923	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-351	JGI2171J19970_10013243	-	1906	1860	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-352	JGI24422J19971_10240577	+	294	340	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-353	JGI24422J19971_10004830	+	6226	6272	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)POP5 (COG1369) →
env-354	JGI2172J19969_10181609	-	256	210	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-355	JGI24422J19971_10009670	-	3736	3690	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-356	JGI2172J19969_10028492	+	394	440	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912) →
env-357	JGI24422J19971_10492128	-	124	78	RNA → ← hypo
env-358	JGI24422J19971_10371442	+	38	84	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-359	JGI24019J35510_1000149	+	57719	57764	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-360	JGI24020J35080_1000786	+	20256	20301	RNA →
env-361	JGI24020J35080_1002222	-	8791	8746	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-362	JGI24422J19971_10000253	-	1868	1822	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-363	JGI26339J46600_10000361	+	3851	3897	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-364	JGI24025J20009_10035112	-	1739	1692	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-365	JGI24422J19971_10447265	-	312	266	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-366	JGI24422J19971_10005604	-	2467	2422	RNA → hypo → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-367	JGI2171J19970_10311510	+	423	468	RNA → hypo →
env-368	JGI24422J19971_10296037	-	379	334	RNA → hypo → RPL15A (COG1632)PRK04243 (PRK04243) →
env-369	JGI24422J19971_10083467	+	1365	1411	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-370	JGI24422J19971_10004103	-	1823	1778	RNA → hypo → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-371	JGI2172J19969_10042350	+	1081	1126	RNA → hypo → RPL15A (COG1632)PRK04243 (PRK04243) →
env-372	JGI2173J19968_10455679	-	124	79	RNA → hypo →

env-373	JGI2171J19970_10583661	+	269	314	RNA → hypo →
env-374	SMTZ1_10006093	+	9757	9802	RNA → hypo → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-375	JGI24025J20009_10133169	-	100	54	RNA → ← hypo
env-376	JGI24422J19971_10019282	-	678	632	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-377	JGI24025J20009_10005934	-	75	29	RNA →
env-378	JGI24025J20009_10025887	+	2637	2683	RNA →
env-379	JGI24025J20009_10011070	+	4857	4903	RNA →
env-380	JGI24025J20009_10053632	+	1424	1470	RNA → ← hypo
env-381	JGI24422J19971_10774031	-	188	142	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-382	JGI2171J19970_10721007	-	71	25	RNA →
env-383	JGI24025J20009_10067810	-	1101	1055	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → COG1325 (COG1325)PRK14555 (PRK14555) →
env-384	JGI24025J20009_10468419	-	121	75	RNA →
env-385	JGI2172J19969_10020584	-	1314	1266	RNA → hypo → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
env-386	JGI24422J19971_10090327	-	1116	1068	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → COG1325 (COG1325)PRK14555 (PRK14555) →
env-387	JGI24422J19971_10132992	-	55	7	RNA → hypo →
env-388	JGI24721J26819_10042702	+	773	820	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-389	JGI24721J44947_10035793	+	3282	3329	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
env-390	JGI24721J26819_10782576	-	189	142	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-391	JGI24721J44947_11017790	-	189	142	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-392	GBSCES77_Contig_41123	-	1948	1904	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-393	GBSCES77_Contig_16200	-	2430	2386	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-394	GBSCES77_Contig_3030	+	791	835	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-395	GBSCES77_Contig_34313	+	671	715	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-396	GBSCES77_Contig_24520	-	2097	2053	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-397	GBSCES77_Contig_45658	+	559	603	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-398	GBSCES77_Contig_11719	-	2430	2386	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-399	GBSCES77_Contig_6779	+	671	715	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-400	GBSCES77_Contig_20802	-	2430	2386	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-401	GBSCES77_Contig_29831	-	2430	2386	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-402	JGI20130J15003_1003712	-	4413	4369	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →

env-403	JGI20130J15133_1003712	-	4413	4369	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-404	JGI24721J26819_10021412	-	955	911	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) →
env-405	JGI24721J44947_10036157	+	3704	3748	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) →
env-406	JGI20130J15003_1001502	+	15316	15361	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-407	JGI20130J15133_1001502	+	15316	15361	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-408	JGI24721J26819_10470799	+	270	315	RNA →
env-409	JGI24721J44947_10040429	+	409	454	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-410	JGI20130J15003_1014452	-	2679	2634	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-411	JGI20130J15133_1014452	-	2679	2634	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-412	JGI24721J26819_10066975	-	1900	1855	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-413	JGI24721J44947_10053920	-	3312	3267	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → RPL15A (COG1632)PRK04243 (PRK04243) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-414	JGI24721J26819_10007452	+	1045	1090	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-415	JGI24721J44947_10012689	+	1045	1091	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-416	JGI24721J26819_10000566	+	1047	1092	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-417	JGI24721J44947_10000929	-	39531	39486	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-418	JGI20130J15003_1040014	+	320	364	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) →
env-419	JGI20130J15133_1040014	+	320	364	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) →
env-420	JGI24721J26819_10008710	-	5175	5131	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-421	JGI24721J44947_10014925	-	5175	5131	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-422	JGI20130J15003_1006708	+	320	364	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-423	JGI20130J15133_1006708	+	320	364	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-424	JGI24422J19971_10000261	-	3582	3531	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-425	JGI2173J19968_10016998	+	1834	1885	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) →

env-426	SMTZ1_10000482	+	8104	8155	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-427	JGI2171J19970_10271144	-	353	302	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-428	SMTZ1_10032630	-	6487	6436	RNA → ←-hypo
env-429	JGI2172J19969_10033071	+	406	457	RNA → ←-hypo
env-430	JGI2171J19970_10083154	-	519	468	RNA → ←-hypo
env-431	JGI24422J19971_10005257	+	6290	6341	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-432	JGI24422J19971_10022574	+	1413	1464	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)Ribosomal_L13e (pfam01294) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-433	JGI2172J19969_10002202	-	186	135	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-434	JGI2172J19969_10005325	+	99	150	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-435	JGI2173J19968_10000262	+	3449	3500	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-436	JGI2171J19970_10002036	+	2023	2074	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-437	JGI24422J19971_10243708	+	627	678	RNA →
env-438	JGI24721J44947_10007540	-	2578	2525	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-439	JGI24721J26819_10005385	+	10350	10403	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-440	JGI2172J19969_10330441	+	133	180	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-441	JGI24422J19971_10230678	-	541	494	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-442	JGI24422J19971_10330695	-	518	473	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-443	JGI2171J19970_10787211	-	272	227	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-444	JGI2172J19969_10018448	+	977	1022	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-445	SMTZ1_10005895	-	12232	12187	RNA → hypo → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-446	JGI2171J19970_10523375	-	233	185	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-447	JGI24721J26819_10011755	+	847	896	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-448	JGI24721J44947_10000482	-	52170	52121	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK12277 (PRK12277)RPL13 (COG4352) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-449	JGI2173J19968_10000733	+	4783	4829	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-450	JGI2172J19969_10000762	-	8526	8480	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-451	JGI2171J19970_10187156	-	317	271	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-452	JGI24422J19971_10000606	+	10914	10960	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-453	NCBI_PBSM_READ_68102390	+	1020	1063	RNA →
Mvo-1-1	NC_014222.1	-	1392579	1392536	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-454	SakLake120mDRAFT_c0000339	+	19224	19273	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → RPP1 (COG1603)PRK00912 (PRK00912) → RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → SdoI (COG1500)PRK13760 (PRK13760) → fpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →

ume-1-1	NC_009464.1	-	994905	994839	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Rrp4 (COG1097)PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366)PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365)PRK04282 (PRK04282) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → Pcc1 (COG2892)Pcc1 (pfam09341) → gimC_beta (TIGR02338)Prefoldin_2 (pfam01920) → hypo → hypo → hypo →
CMe-2-1	NZ_JMIY01000003.1	+	337389	337437	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
Mev-1-1	NC_014253.1	-	592639	592588	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)POP5 (COG1369) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → hypo → hypo → hypo →
env-455	WSSedA2C_c207490	+	72	126	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-456	WSSedA2Ca3_1207490	+	72	126	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-457	WSSedA1TJGL_c024695	+	624	678	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-458	WSSedA1Ba2_1000622	+	1087	1141	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-459	WSSedA1Ba3_1003811	+	2343	2397	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-460	JGI26437J51864_10646690	+	117	172	RNA →
env-461	WSSedB1B2_c010830	+	452	507	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-462	JGI20214J14112_1483376	+	5	54	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Mzh-1-1	NC_015676.1	-	1281814	1281760	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Rrp4 (COG1097)PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366)PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365)PRK04282 (PRK04282) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → Brix (smart00879)IMP4 (COG2136) → Pcc1 (COG2892)Pcc1 (pfam09341) → gimC_beta (TIGR02338)Prefoldin_2 (pfam01920) → PRK14538 (PRK14538)DHH (pfam01368) → PaaK (COG1541)AMP-binding_C_2 (pfam14535) →
env-463	JGI24020J35080_1007792	+	2787	2832	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-464	JGI24019J35510_1000013	+	160353	160398	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Rrp4 (COG1097)PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366)PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365)PRK04282 (PRK04282) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → Pcc1 (COG2892)Pcc1 (pfam09341) → gimC_beta (TIGR02338)GimC (COG1382) →
env-465	JGI24724J26744_10037895	-	1732	1679	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → ABC_ATPase (cd00267)AAA (smart00382)NapF (COG1145)Fer4.7 (pfam12838) →
env-466	LWFCAn_GLQU6AQ01BL2KP	-	265	213	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-467	JGI24730J26740_1001090	+	9520	9567	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
env-468	JGI24730J26740_1002557	-	5350	5303	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
env-469	taComm3_C6796	+	6853	6906	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) →

env-470	JGI12104J13512.1001091	+	6473	6526	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) →
env-471	JGI11944J13513.1001226	+	6477	6530	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) →
Mta-1-1	NZ_AG1Y02000001.1	+	329402	329455	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) →
env-472	TB_LI09_4.10122878	+	413	459	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-473	TB_LI09_4.10800703	+	157	203	RNA → hypo →
env-474	BDMC2_contig02027	-	540	492	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Mpa-1-1	NC_011832.1	-	2661123	2661072	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → IMP4 (COG2136)PRK00933 (PRK00933) → Pcc1 (COG2892)PRK14887 (PRK14887) → yhbS (COG3153)Acetyltransf.7 (pfam13508) →
env-475	JGI20225J20221.1000037	+	100793	100845	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → Pcc1 (COG2892)Pcc1 (pfam09341) → gimC_beta (TIGR02338)Prefoldin_2 (pfam01920) →
env-476	WSSedL1Cam.c0003	-	103534	103482	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → Pcc1 (COG2892)Pcc1 (pfam09341) → gimC_beta (TIGR02338)Prefoldin_2 (pfam01920) →
env-477	JGI24729J20445.1007040	+	2798	2848	RNA → ←hypo
env-478	JGI24730J26740.1000148	-	22730	22680	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → PRK00933 (PRK00933) → Pcc1 (COG2892)Pcc1 (pfam09341) →
env-479	3300000558.10037240	-	1302	1247	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-480	3300000568.10759524	-	62	6	RNA →
env-481	3300000032.0445971	-	908	852	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912) →
env-482	3300000568.10762646	-	251	195	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-483	3300000568.10812672	+	106	162	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-484	3300000568.10718528	+	26	82	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-485	3300001567.10000590	+	50837	50893	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → Pcc1 (COG2892)Pcc1 (pfam09341) →
env-486	3300000568.10082522	+	368	421	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-487	3300001567.10000995	-	27743	27691	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → Pcc1 (COG2892)Pcc1 (pfam09341) →

env-488	JGI26437J51864_10005597	-	1881	1829	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-489	lwComb_BCIB16813_x1	+	697	749	RNA →
env-490	WSSedA1Ba3_1028801	+	186	238	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-491	WSSedA1Ba3_1008109	+	557	609	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → Proteasome_A_N (smart00948)PRE1 (COG0638) →
env-492	WSSedA1TJGL_c023358	-	396	344	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-493	WSSedA1Ba_1000153	-	7580	7528	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → Pcc1 (COG2892)Pcc1 (pfam09341) →
env-494	WSSedA1Ba2_1001361	-	527	475	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-495	JGI26437J51864_10016078	-	877	823	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912) →
env-496	LWFCAn_GLQU6AQ01EP314	-	386	333	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-497	JGI24729J20445_1011542	+	712	765	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-498	JGI24728J21555_1031680	-	431	378	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-499	3300001580_10004398	-	7500	7446	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → Pcc1 (COG2892)Pcc1 (pfam09341) → gimC_beta (TIGR02338)Prefoldin_2 (pfam01920) → spoT_relA (TIGR00691)SpoT (COG0317) →
env-500	JGI24729J20445_1004823	-	1184	1131	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-501	JGI24732J26686_1002952	-	3151	3098	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) →
env-502	JGI24732J26686_1094881	-	48	1	RNA →
env-503	JGI24729J20445_1001141	+	9710	9763	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-504	JGI24732J26686_1139212	-	359	306	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-505	TB_GS10_10_10036752	+	1072	1125	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-506	JGI24730J26740_1018719	+	53	106	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → RNase_P_Rpp14 (pfam01900) →
env-507	SakLake120mDRAFT_c0042489	-	330	276	RNA → ←hypo →
env-508	3300001605_10380848	+	193	245	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-509	3300000032_0318192	-	212	159	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-510	3300001580_10019781	-	923	870	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → hypo →
env-511	3300000558_10012475	+	6222	6275	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-512	3300001567_10108382	+	569	622	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-513	3300001580_10224100	+	558	611	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-514	JGI26437J51864_10657425	-	97	44	RNA → hypo →
env-515	3300001580_10162759	+	554	608	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-516	3300001567_10107871	+	571	625	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-517	JGI24728J21555_1000054	-	38560	38510	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-518	JGI24728J21555_1000137	-	38579	38529	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →

env-519	JGI24728J21555.1000138	+	5955	6005	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-520	JGI24728J21555.1000139	+	5947	5997	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-521	JGI24728J21555.1000140	-	38568	38518	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-522	SL_5KL.010_SED_10012660	-	440	389	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-523	LCWY01000735.1	-	1783	1732	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-524	LCWZ01000388.1	-	3340	3289	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → PRK13760 (PRK13760)SBDS (pfam01172) → Sdo1 (COG1500)SBDS_C (pfam09377) → hypo →
env-525	SL_5KL.010_SED_10011794	+	2661	2714	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-526	SL_3KL.010_SED_10302459	+	187	240	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-527	LCWZ01004261.1	-	1068	1015	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-528	JGI2065J20421.1127642	+	79	128	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-529	2013877062	+	961	1010	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-530	BMHB3a.c117030	+	389	438	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-531	BMHB3a.c11385	-	71	22	RNA → hypo →
env-532	JGI24730J26740.1000056	+	41101	41154	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → Pcc1 (COG2892)Pcc1 (pfam09341) → gimC_beta (TIGR02338)GimC (COG1382) →
env-533	JGI24730J26740.1000097	-	49515	49462	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → Pcc1 (COG2892)Pcc1 (pfam09341) → gimC_beta (TIGR02338)GimC (COG1382) →
CMe-1-1	NC_009712.1	-	1906137	1906085	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → Pcc1 (COG2892)Pcc1 (pfam09341) → PRK09343 (PRK09343)GimC (COG1382) →
env-534	PRSSGFe2_Sequence0000007570	-	3311	3258	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) →
env-535	JGI26339J46600.10050974	+	104	156	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → PRK00912 (PRK00912) →
env-536	SL_3KL.010_SED_10003966	-	9606	9558	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → IMP4 (COG2136)PRK00933 (PRK00933) → Pcc1 (COG2892)Pcc1 (pfam09341) → PRK09343 (PRK09343)GimC (COG1382) →
env-537	SL_3KL.010_SED_10034542	+	3130	3178	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →

env-538	JGI12104J13512_1003036	-	8013	7965	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-539	JGI11944J13513_1000334	+	17500	17548	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-540	PCEOT_contig21575	-	446	398	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Mhu-1-1	NC_007796.1	+	2543565	2543613	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPPI (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → PRK00933 (PRK00933) → Pcc1 (COG2892)Pcc1 (pfam09341) → PRK09343 (PRK09343)Prefoldin_2 (pfam0192 hypo → hypo → hypo → PRK14960 (PRK14960)CARDB (pfam07705)NosD (pfam05048)Beta_helix (pfam13229)DUF4832 (pfam16116) PRK14960 (PRK14960)CARDB (pfam07705)NosD (pfam05048)Beta_helix (pfam13229)DUF4832 (pfam16116) PRK14960 (PRK14960)CARDB (pfam07705)NosD (pfam05048)Beta_helix (pfam13229)DUF4832 (pfam16116)
env-541	JGI24730J26740_1152247	-	310	262	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-542	3300001580_10002056	+	12087	12136	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-543	JGI26437J51864_10233459	-	229	178	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-544	JGI24730J26740_1087991	-	503	453	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-545	JGI24731J21663_1016982	-	1473	1423	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPPI (COG1603)PRK00912 (PRK00912) → hypo →
env-546	JGI24732J26686_1102613	-	402	352	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Mli-1-1	NZ_CM001555.1	+	718118	718169	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → RPC10 (COG1996)rpoP (PRK00398) → IMP4 (COG2136)PRK00933 (PRK00933) → IMP4 (COG2136)PRK00933 (PRK00933) → Pcc1 (COG2892)Pcc1 (pfam09341) → Pcc1 (COG2892)Pcc1 (pfam09341) → gimC_beta (TIGR02338)GimC (COG1382) → gimC_beta (TIGR02338)GimC (COG1382) →
env-547	JGI24712J26585_10534437	+	165	211	RNA →
env-548	JGI24711J26586_10063235	+	193	239	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-549	JGI24709J26583_10002362	+	11095	11141	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-550	JGI24710J26742_10002715	-	4756	4710	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-551	JGI24500J29687_10032170	+	390	436	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) →

Mse-1-1	NZ_JXOJ01000004.1	+	7876	7922	RNA → hypo → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → IMP4 (COG2136)PRK00933 (PRK00933) → Pcc1 (COG2892)Pcc1 (pfam09341) →
Mma-1-1	NC_009051.1	-	1680920	1680874	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → IMP4 (COG2136)PRK00933 (PRK00933) → Pcc1 (COG2892)Pcc1 (pfam09341) →
Msp-5-1	NZ_JMIO01000049.1	+	18527	18573	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → IMP4 (COG2136)PRK00933 (PRK00933) → hypo → Pcc1 (COG2892)Pcc1 (pfam09341) →
env-552	JGI24712J26585_10228661	+	308	354	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-553	JGI24707J26582_10055176	-	84	39	RNA → ← hypo
env-554	JGI24708J26588_10022103	-	1842	1797	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-555	JGI24712J26585_10005651	+	1497	1542	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-556	JGI24710J26742_10007141	+	2776	2821	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-557	JGI24502J29692_10004908	+	2312	2357	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-558	JGI24503J29689_10004405	+	2321	2366	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-559	JGI24707J26582_10007021	+	73	118	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-560	JGI24708J26588_10445994	-	46	1	RNA →
env-561	JGI24711J26586_10009933	-	1842	1797	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-562	JGI24709J26583_10016669	+	2203	2248	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-563	JGI24500J29687_10006466	+	556	601	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → Proteasome_A_N (smart00948)PRE1 (COG0638) →
env-564	3300000568_10010387	+	293	339	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-565	3300000032_0492979	+	132	178	RNA →
env-566	3300000558_10049236	+	193	239	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-567	3300000032_0511128	+	210	256	RNA →
env-568	3300000032_0037457	-	630	584	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-569	3300001592_10229257	+	50	96	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →

env-570	3300000507_100942	+	577	624	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-571	JGI24713J26584_10001369	+	2226	2272	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-572	JGI24714J26587_10001520	-	13960	13913	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-573	JGI24504J29685_1025823	+	107	154	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-574	3300001592_10015540	-	752	702	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-575	3300000032_0000829	+	1108	1158	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → PRK00933 (PRK00933) → Pcc1 (COG2892)PRK14887 (PRK14887) → gimC_beta (TIGR02338)GimC (COG1375) →
env-576	3300000558_12043292	+	53	104	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-577	3300000568_10821221	-	73	23	RNA → hypo →
env-578	3300001567_10009047	+	577	629	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-579	3300001592_10165112	+	124	175	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-580	3300001567_10003826	+	5679	5730	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) →
env-581	3300000032_0010281	-	14322	14272	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) →
env-582	3300000558_11443494	-	245	195	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-583	3300000568_10668294	-	19377	19327	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) →
env-584	3300001580_10001349	-	19377	19327	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) →
env-585	JGI12104J13512_1001025	+	6838	6890	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) →
env-586	JGI11944J13513_1001244	+	5853	5905	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) →
env-587	taComm3_C10759	-	580	529	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-588	3300001592_10896941	-	243	192	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-589	2227094145	-	323	269	RNA → ← hypo →
env-590	2227164185	+	1201	1252	RNA → ← hypo →

env-591	2226969280	+	1286	1337	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-592	2227071043	+	381	432	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-593	IMNBL1_c0001816	-	461	410	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-594	JGI20163J15578_10187233	-	825	772	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-595	JGI996J12353_1000527	-	5644	5593	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-596	2227035939	+	2727	2778	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-597	2227538537	-	5296	5245	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-598	IMNBL1_c0047771	-	55	4	RNA →
env-599	2226957925	-	288	237	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-600	IMNBL1_c0018460	-	1848	1797	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-601	JGI994J12354_10008059	+	6285	6336	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-602	2227477430	-	52	1	RNA →
env-603	2227211080	-	136	82	RNA →
env-604	2227517699	+	3271	3325	RNA → hypo →
env-605	IMNBL1_c0279633	+	244	298	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-606	JGI994J12354_10081286	-	57	3	RNA → ← hypo
env-607	2227618780	-	56	2	RNA →
env-608	IMNBL1_c0051091	+	1242	1296	RNA → hypo →
env-609	JGI994J12354_10078750	-	57	3	RNA →
env-610	IMNBL1_c0049435	+	1175	1227	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-611	2227139717	-	365	311	RNA → ← hypo
env-612	JGI994J12354_10115912	-	1015	961	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
env-613	IMNBL1_c0291723	+	33	87	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-614	IMNBL1_c0045419	+	1265	1319	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-615	JGI994J12354_10079817	-	170	116	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-616	3300000594_10398	+	31	76	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
Mco-1-1	NC_017034.1	+	356660	356705	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → BcsA (COG1215)glyco_like_mftF (TIGR04283) →
env-617	SL_5KL_010_SED_10351708	+	176	228	RNA →
env-618	SL_8KL_010_SED_10426921	+	67	119	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Mps-1-1	NC_018876.1	+	2608031	2608076	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Rrp4 (COG1097)PRK04163 (PRK04163)Pup (pfam05639) → RNase_PH_archRRP41 (cd11366)PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365)PRK04282 (PRK04282) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) RPC10 (COG1996)rpoP (PRK00398) →
env-619	JGI25321J50212_10071092	-	517	472	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-620	3300001567_10059738	+	145	190	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555)
Mti-1-1	NZ_AZAJ01000001.1	-	571920	571858	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)POP5 (COG1369) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Rrp4 (COG1097)PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366)PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365)PRK04282 (PRK04282) → rpl37ae (PRK03976)Ribosomal_L37ae (pfam01780) RPC10 (COG1996)rpoP (PRK00398) →
env-621	2231757710	+	31	79	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →

Mba-2-1	NZ_CP009517.1	-	1228703	1228652	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
env-622	B4_c.Cons7318	+	381	432	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-623	JGI20225J20221_1000854	-	92739	92688	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
env-624	3300000507_111820	-	641	590	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-625	JGI24714J26587_10012885	-	2658	2606	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
env-626	JGI24712J26585_10034019	-	1360	1308	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) →
env-627	JGI24711J26586_10062120	+	435	487	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Mho-2-1	NZ_CP009516.1	-	3291833	3291782	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
env-628	JGI24731J21663_1002020	-	12930	12879	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
env-629	JGI24731J21663_1031455	-	306	255	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-630	JGI12419J13241_1124316	+	56	108	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Mth-1-1	NZ_CP009501.1	-	381745	381693	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Msp-13-1	NZ_CP009524.1	-	1406720	1406669	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mva-1-1	NZ_CP009520.1	-	1438747	1438696	RNA → COG4585 (COG4585) → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mba-4-1	NZ_CP009528.1	-	2670750	2670699	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mba-1-1	NZ_CP009530.1	+	476717	476768	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mba-3-1	NZ_CP008746.1	+	468339	468390	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
env-631	BMHB3a_c34562	+	135	186	RNA →
env-632	JGI2065J20421_1016166	+	872	923	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
env-633	B3_all_c.Cons125890	+	461	512	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Mla-1-1	NZ_CP009515.1	+	2312125	2312176	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mba-5-1	NC_007355.1	+	3156160	3156211	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mba-6-1	NZ_CP009526.1	-	2909575	2909524	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Msp-7-1	NZ_JJQY01000019.1	-	28722	28671	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Msp-8-1	NZ_JJOV01000053.1	-	61527	61476	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Msp-10-1	NZ_JJOX01000057.1	-	29319	29268	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Msp-11-1	NZ_JJOY01000041.1	-	29252	29201	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Msp-6-1	NZ_JJQL01000038.1	-	47137	47086	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Msp-12-1	NZ_JJOZ01000046.1	-	28637	28586	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Msp-9-1	NZ_JJOW01000294.1	-	20540	20489	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Msp-16-1	NZ_CP009503.1	+	3735833	3735884	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Msp-15-1	NZ_CP009504.1	-	2456027	2455976	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →

env-634	JGI24731J21663_1041287	+	802	854	RNA → ← hypo
Mso-1-1	NZ_JQLR01000001.1	+	2442416	2442467	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-5-1	NC_003901.1	+	3119311	3119362	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-6-1	NZ_CP009513.1	+	3747266	3747317	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-8-1	NZ_CP009511.1	-	2504533	2504482	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-7-1	NZ_CP009512.1	-	2625933	2625882	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-1	NZ_JJPB01000050.1	+	11936	11987	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-2	NZ_JJQI01000092.1	-	16421	16370	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-3	NZ_JJQC01000141.1	-	42369	42318	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-4	NZ_JJPX01000042.1	+	11441	11492	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-5	NZ_JJQA01000093.1	-	42369	42318	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-6	NZ_JJPN01000151.1	+	11194	11245	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-7	NZ_JJOS01000070.1	+	20296	20347	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-8	NZ_JJPG01000087.1	+	11936	11987	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-9	NZ_JJPP01000085.1	+	31236	31287	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-10	NZ_JJQB01000132.1	-	42369	42318	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-11	NZ_JJQG01000125.1	+	110287	110338	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-12	NZ_JJPF01000029.1	-	32163	32112	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-13	NZ_JJQR01000115.1	+	47927	47978	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-14	NZ_JJQW01000009.1	-	43611	43560	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-15	NZ_JJPO01000048.1	+	11937	11988	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-16	NZ_JJQX01000051.1	+	8135	8186	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-17	NZ_JJQE01000025.1	-	33596	33545	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-18	NZ_JJRA01000090.1	-	35290	35239	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-19	NZ_JJRB01000023.1	-	35592	35541	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-20	NZ_JJOT01000028.1	+	142723	142774	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-21	NZ_JJQS01000135.1	-	34925	34874	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-22	NZ_JJPC01000138.1	+	16225	16276	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-23	NZ_JJOU01000016.1	-	43691	43640	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →

Mma-3-53	NZ_JJQP01000172.1	+	39888	39939	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-54	NZ_JJQN01000109.1	+	11937	11988	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-55	NZ_JJQT01000136.1	-	6188	6137	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-3-56	NZ_JJQV01000102.1	-	35394	35343	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-9-1	NZ_CP009509.1	+	2909485	2909536	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mma-4-1	NZ_CP009514.1	+	1235377	1235428	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Mac-1-1	NC_003552.1	-	2189802	2189751	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
Msi-2-1	NZ_CP009506.1	-	3147028	3146977	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
env-635	WSSedB2T_c104918	+	74	125	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Msi-1-1	NZ_CP009508.1	-	2149794	2149743	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →
env-636	M940CN_1003840	-	2106	2055	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
Msp-14-1	NZ_CP009505.1	-	2602304	2602254	RNA → ←-hypo
env-637	3300001567_10002926	-	2776	2730	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) → PRK03996 (PRK03996)proteasome_alpha (cd01911) →
env-638	DHTCA2_contig15787	+	370	416	RNA →
env-639	AMWB01080572.1	+	1326	1372	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-640	3300001580_10062933	+	412	459	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Mho-1-1	NC_019977.1	+	1869779	1869826	PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) → PRK03996 (PRK03996)proteasome_alpha_archaeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Rrp4 (COG1097)PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366)PRK03983 (PRK03983)PRK05658 (PRK05658) → RNase_PH_archRRP42 (cd11365)PRK04282 (PRK04282) → tp137ae (PRK03976)Ribosomal_L37ae (pfam01780) → RPC10 (COG1996)rpoP (PRK00398) → Brix (smart00879)IMP4 (COG2136) → Pcc1 (COG2892)Pcc1 (pfam09341) → gimC_beta (TIGR02338)GimC (COG1382) →
env-641	AMWB01126899.1	+	489	536	PRK05427 (PRK05427)DHH (pfam01368) → PaaK (COG1541)AMP-binding_C_2 (pfam14535) → RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)POP5 (COG1369) → PRK03996 (PRK03996)proteasome_alpha_archaeal (cd03756) →
Mbu-1-1	NC_007955.1	+	176502	176552	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
env-642	AZIB01003834.1	+	91	141	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
Mme-2-1	NZ_CP009518.1	+	794999	795052	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) →
Mme-1-1	NZ_JRHO01000010.1	+	86627	86680	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → COG1325 (COG1325)PRK14555 (PRK14555) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)POP5 (COG1369) →
Msh-1-1	NZ_JONQ01000008.1	+	45804	45849	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-643	HCF12C_96986	-	646	605	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-644	AUXO016695324.1	-	1274	1233	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-645	JGI12104J13512_1011404	-	2541	2501	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) →

env-646	3300001580_10676249	+	109	149	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) →
env-647	08_07_CONTROL_DNA_scaffold24236_7	-	6049	6007	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
env-648	08_07_XOS_DNA_scaffold878_1	+	2078	2120	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) →
env-649	O8_19_POLYDEXT_DNA_scaffold34267_3	-	167	125	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) →
env-650	JGI1994J12354_10354549	-	293	251	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) →
env-651	JGI24713J26584_10000181	-	19302	19259	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → COG1325 (COG1325) PRK14555 (PRK14555) → RPP1 (COG1603) PRK00912 (PRK00912) → PRK03717 (PRK03717) POP5 (COG1369) → PRK03996 (PRK03996) proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500) PRK13760 (PRK13760) → Rrp4 (COG1097) PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366) PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365) PRK04282 (PRK04282) →
env-652	JGI24714J26587_10000218	+	19819	19862	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → COG1325 (COG1325) PRK14555 (PRK14555) → RPP1 (COG1603) PRK00912 (PRK00912) → PRK03717 (PRK03717) POP5 (COG1369) → PRK03996 (PRK03996) proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500) PRK13760 (PRK13760) → Rrp4 (COG1097) PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366) PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365) PRK04282 (PRK04282) →
env-653	JGI24504J29685_1000272	-	114106	114063	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → COG1325 (COG1325) PRK14555 (PRK14555) → RPP1 (COG1603) PRK00912 (PRK00912) → PRK03717 (PRK03717) POP5 (COG1369) → PRK03996 (PRK03996) proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500) PRK13760 (PRK13760) → Rrp4 (COG1097) PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366) PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365) PRK04282 (PRK04282) →
env-654	JGI24504J29685_1000273	+	20634	20677	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → COG1325 (COG1325) PRK14555 (PRK14555) → RPP1 (COG1603) PRK00912 (PRK00912) → PRK03717 (PRK03717) POP5 (COG1369) → PRK03996 (PRK03996) proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500) PRK13760 (PRK13760) → Rrp4 (COG1097) PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366) PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365) PRK04282 (PRK04282) →
env-655	JGI24505J29691_1005987	+	2006	2049	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → COG1325 (COG1325) PRK14555 (PRK14555) → RPP1 (COG1603) PRK00912 (PRK00912) → PRK03717 (PRK03717) POP5 (COG1369) → PRK03996 (PRK03996) proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500) PRK13760 (PRK13760) → Rrp4 (COG1097) PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366) PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365) PRK04282 (PRK04282) →
env-656	RUMENNODE_3862964_1	+	19057	19104	RNA → hypo → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → hypo →
env-657	AUXO010246320.1	+	2947	2993	RNA →
env-658	RUMENNODE_3957055_1	+	1849	1895	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
Mve-1-1	NZ_JQJK01000008.1	+	40819	40860	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → RPP1 (COG1603) PRK00912 (PRK00912) → PRK03717 (PRK03717) RNase_P_Rpp14 (pfam01900) →
Mar-1-1	NZ_JQKN01000001.1	+	40819	40860	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → RPP1 (COG1603) PRK00912 (PRK00912) → PRK03717 (PRK03717) RNase_P_Rpp14 (pfam01900) →
env-659	JGI24731J21663_1049964	-	360	319	RNA → RPL15A (COG1632) PRK04243 (PRK04243) →
env-660	B3_allc.Cons195859	+	487	528	RNA → RPL15A (COG1632) PRK04243 (PRK04243) →
Msp-4-1	NC_015574.1	+	503676	503718	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → RPP1 (COG1603) PRK00912 (PRK00912) →
env-661	2014734625	+	11972	12018	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → RPP1 (COG1603) PRK00912 (PRK00912) →
env-662	ANASMECb_4085297_C2853	+	11972	12018	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → RPP1 (COG1603) PRK00912 (PRK00912) →
env-663	3300001580_10131017	-	51	5	RNA →
env-664	3300001592_10138106	-	985	939	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
env-665	JGI24712J26585_10348213	-	47	4	RNA → hypo →

env-666	JGI24709J26583_10002022	-	8087	8044	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Rrp4 (COG1097)PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366)PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365)PRK04282 (PRK04282) →
env-667	JGI24710J26742_10000204	+	18022	18065	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Rrp4 (COG1097)PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366)PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365)PRK04282 (PRK04282) →
env-668	JGI24500J29687_10014623	+	1789	1832	RNA → hypo → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Rrp4 (COG1097)PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366)PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365)PRK04282 (PRK04282) →
env-669	JGI24501J29690_1010023	+	224	267	RNA → hypo → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Rrp4 (COG1097)PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366)PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365)PRK04282 (PRK04282) →
env-670	JGI24711J26586_10150374	-	270	227	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-671	JGI24731J21663_1027378	-	1115	1069	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
env-672	JGI24729J20445_1009801	+	789	835	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) →
Mfo-2-1	NZ_AMPO01000006.1	+	4040	4086	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → RPP1 (COG1603)PRK00912 (PRK00912) →
env-673	JGI20214J14112_1380804	-	244	198	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-674	JGI24731J21663_1005210	+	4307	4353	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) →
Msp-2-1	NC_023044.1	+	529281	529327	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)RNase_P_Rpp14 (pfam01900) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Rrp4 (COG1097)PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366)PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365)PRK04282 (PRK04282) →
Mfo-1-1	NZ_CP006933.1	-	1785014	1784968	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → RPP1 (COG1603)PRK00912 (PRK00912) → PRK03717 (PRK03717)POP5 (COG1369) → PRK03996 (PRK03996)proteasome_alpha_archeal (cd03756) → Sdo1 (COG1500)PRK13760 (PRK13760) → Rrp4 (COG1097)PRK04163 (PRK04163) → RNase_PH_archRRP41 (cd11366)PRK03983 (PRK03983) → RNase_PH_archRRP42 (cd11365)PRK04282 (PRK04282) →
env-675	PRSSGFe2_Sequence0000019669	+	951	992	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
env-676	JGI12104J13512_1023983	-	1071	1030	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
env-677	JGI11944J13513_1001397	-	15451	15410	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) → PRK03717 (PRK03717)POP5 (COG1369) →
env-678	3300001592_10385652	-	169	128	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →

Msp-1-1	NC_015216.1	-	2225955	2225907	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → RPP1 (COG1603) PRK00912 (PRK00912) → RPP1 (COG1603) PRK00912 (PRK00912) → PRK03717 (PRK03717) RNase_P_Rpp14 (pfam01900) →
env-679	JGI2065J20421_1000005	+	287784	287832	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → RPP1 (COG1603) PRK00912 (PRK00912) →
env-680	WSSedB2Ca_1123116	-	192	151	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) →
Msp-3-1	NZ_JQLY01000001.1	+	314798	314839	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → RPP1 (COG1603) PRK00912 (PRK00912) → PRK03717 (PRK03717) POP5 (COG1369) →
env-681	B3_all.c.Cons30296	+	231	272	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) →
env-682	B3_all.c.Cons42794	+	295	336	RNA → RPL15A (COG1632) PRK04243 (PRK04243) →
env-683	SL_5KL_010_SED_10126917	-	228	187	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) →
Mor-1-1	NZ_HG796200.1	-	398447	398403	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
Msm-14-1	NZ_AELU01000003.1	-	71106	71058	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → YurZ (COG0599) →
Msm-4-1	NZ_DS996911.1	+	39506	39554	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
env-684	scaffold116291_3_V1.CD-8	-	666	618	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) →
env-685	4491416.3_NODE_1031	+	40283	40331	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → YurZ (COG0599) →
env-686	scaffold101749_2_MH0011	+	6770	6818	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → YurZ (COG0599) →
env-687	scaffold45427_5_O2.UC-12	+	989	1037	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) →
env-688	scaffold45612_1_V1.CD-9	-	1221	1173	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
env-689	scaffold99220_1_V1.UC-8	-	16733	16685	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
env-690	UnmappedStool_Broad_scaffold_1133206	+	660	708	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
env-691	DLM022_scaffold90350.1	+	654	702	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) → YurZ (COG0599) →
env-692	ADJS01014849.1	-	6089	6041	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
env-693	SRS014235_C3325073	+	168	216	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) →
env-694	SRS014979_C3300304	-	2323	2275	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
Msm-1-1	NZ_CCXV01000062.1	-	3684	3636	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
Msm-19-1	NZ_AELZ01000004.1	-	93410	93362	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
Msm-11-1	NZ_AELR01000006.1	-	74375	74327	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
Msm-23-1	NZ_AEMD01000013.1	-	30363	30315	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
Msm-12-1	NZ_AELS01000005.1	-	55986	55938	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
Msm-13-1	NZ_AELT01000005.1	-	60811	60763	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
Msm-22-1	NZ_AEMC01000004.1	-	93153	93105	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
Msm-21-1	NZ_AEMB01000003.1	-	93149	93101	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
Msm-20-1	NZ_AEMA01000007.1	-	93143	93095	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →
Msm-10-1	NZ_AELQ01000008.1	-	55971	55923	RNA → PRK04243 (PRK04243) Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555) RNA_binding (pfam01877) →

Msm-18-1	NZ_AELY01000006.1	-	93416	93368	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
Msm-9-1	NZ_AELO01000021.1	-	3502	3454	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
Msm-5-1	NZ_AEKU01000009.1	-	30411	30363	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
Msm-17-1	NZ_AELX01000007.1	-	93439	93391	RNA → RPL15A (COG1632)PRK04243 (PRK04243) → hypo → hypo → PRK14555 (PRK14555)RNA_binding (pfam01877) →
Msm-8-1	NZ_AELN01000005.1	-	30375	30327	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
Msm-2-1	NC_009515.1	-	288824	288776	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → YurZ (COG0599) →
Msm-3-1	NZ_GG704759.1	-	1679032	1678984	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
env-695	scaffold43629_1_V1.CD-14	+	589	637	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Msm-16-1	NZ_AELW01000005.1	-	70811	70763	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → YurZ (COG0599) →
Msm-15-1	NZ_AELV01000008.1	-	55039	54991	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → YurZ (COG0599) →
Msm-6-1	NZ_AELL01000010.1	-	30405	30357	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
Msm-7-1	NZ_AELM01000013.1	-	30412	30364	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
env-696	JGI26339J46600_10088026	-	219	169	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-697	JGI24730J26740_1120805	+	4	51	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-698	LGVF01127568.1	+	648	697	RNA →
env-699	LGOV01033634.1	-	1312	1261	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) → PRK00912 (PRK00912)RNase_P_p30 (pfam01876) →
env-700	LGVE01048678.1	-	619	570	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-701	LGVF01407700.1	+	445	496	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-702	LGVE01104961.1	-	973	923	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-703	LGVF01373635.1	-	2320	2270	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-704	LGVE01091035.1	+	101	150	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-705	LGVF01174437.1	-	990	941	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-706	LGVE01094124.1	+	632	681	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-707	JGI24024J18818_10368636	+	225	274	RNA →
env-708	LGVF01194351.1	-	1341	1292	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
env-709	PBDCA2_contig12847	-	760	713	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → PRK14555 (PRK14555)RNA_binding (pfam01877) →
env-710	JGI2161J19892_1008470	-	767	717	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-711	JGI2172J19969_10002521	+	546	596	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-712	JGI24422J19971_10970220	+	95	145	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
env-713	JGI2160J19893_10000003	-	51272	51222	RNA → RPL15A (COG1632)PRK04243 (PRK04243) →
Ngr-1-1	NC_019792.1	-	2417457	2417388	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hti-1-1	NC_021921.1	-	2128296	2128249	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Npe-1-1	NC_019962.1	-	782478	782407	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hsp-7-1	NZ_ANPG01000166.1	-	1829	1769	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hlu-1-1	NZ_AOLH01000025.1	+	31699	31759	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hal-1-1	NZ_AOLL01000011.1	+	546240	546300	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hvo-1-1	NC_013967.1	-	495895	495835	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Hje-1-1	NC_014297.1	+	2507160	2507224	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) → ThiF_MoeB_HesA_family (cd00757)adenyl_thiF (TIGR02356) →
Hbo-1-1	NC_014729.1	+	2535983	2536036	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nma-1-1	NC_013922.1	-	988031	987966	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →
Nti-1-1	NZ_KB913017.1	+	2799470	2799545	RNA → PRK04243 (PRK04243)Ribosomal_L15e (pfam00827) →

4.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 4.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one eL15-

- cd00075 (1) Histidine kinase-like ATPases; This family includes several ATP-binding proteins for example: histidine kinase, DNA gyrase B, topoisomerases, heat shock protein HSP90, phytochrome-like ATPases and DNA mismatch repair proteins
- cd00267 (1) ATP-binding cassette transporter nucleotide-binding domain.
- cd00293 (4) Usp: Universal stress protein family.
- cd00757 (26) ThiF_MoeB_HesA.
- cd01066 (1) A family including aminopeptidase P, aminopeptidase M, and prolidase.
- cd01088 (1) Methionine Aminopeptidase 2.
- cd01911 (1) proteasome alpha subunit.
- cd02153 (2) The tRNA binding domain is also known as the Myf domain in literature.
- cd03024 (2) DsbA family, FrnE subfamily; FrnE is a DsbA-like protein containing a CXXX motif.
- cd03756 (76) proteasome_alpha_archaeal.
- cd06067 (3) Endopeptidases belonging to membrane-bound hydrogen evolving hydrogenase group. [NiFe]
- cd11365 (19) RRP42 subunit of archaeal exosome.
- cd11366 (19) RRP41 subunit of archaeal exosome.
- cd11386 (1) Methyl-accepting chemotaxis protein (MCP), signaling domain.
- COG0249 (3) DNA mismatch repair ATPase MutS [Replication, recombination and repair]
- COG0317 (1) (p)ppGpp synthase/hydrolase, HD superfamily [Signal transduction mechanisms, Transcription]
- COG0323 (1) DNA mismatch repair ATPase MutL [Replication, recombination and repair]
- COG0599 (7) Uncharacterized conserved protein YurZ, alkylhydroperoxidase/carboxymuconolactone decarboxylase family [General function prediction only]
- COG0638 (2) 20S proteasome, alpha and beta subunits [Posttranslational modification, protein turnover, chaperones]
- COG0840 (5) Methyl-accepting chemotaxis protein [Cell motility, Signal transduction mechanisms]
- COG0864 (3) Metal-responsive transcriptional regulator, contains CopG/Arc/MetJ DNA-binding domain [Transcription]
- COG1097 (19) Exosome complex RNA-binding protein Rrp4, contains S1 and KH domains [Translation, ribosomal structure and biogenesis]
- COG1145 (1) Ferredoxin [Energy production and conversion]
- COG1146 (6) NAD-dependent dihydropyrimidine dehydrogenase, PreA subunit [Nucleotide transport and metabolism]
- COG1215 (1) Glycosyltransferase, catalytic subunit of cellulose synthase and poly-beta-1,6-N-acetylglucosamine synthase [Cell motility]
- COG1325 (106) Exosome subunit, RNA binding protein with dsRBD fold [Translation, ribosomal structure and biogenesis]
- COG1369 (108) RNase P/RNase MRP subunit POP5 [Translation, ribosomal structure and biogenesis]
- COG1382 (10) Prefoldin, chaperonin cofactor [Posttranslational modification, protein turnover, chaperones]
- COG1500 (76) Ribosome maturation protein Sdo1 [Translation, ribosomal structure and biogenesis]
- COG1541 (2) Phenylacetate-coenzyme A ligase PaaK, adenylate-forming domain family [Coenzyme transport and metabolism]
- COG1603 (223) RNase P/RNase MRP subunit p30 [Translation, ribosomal structure and biogenesis]
- COG1632 (147) Ribosomal protein L15E [Translation, ribosomal structure and biogenesis]
- COG1721 (2) Redox-sensitive bicupin YhaK, pirin superfamily [General function prediction only]
- COG1996 (35) DNA-directed RNA polymerase, subunit RPC12/RpoP, contains C4-type Zn-finger [Transcription]
- COG1997 (1) Ribosomal protein L37AE/L43A [Translation, ribosomal structure and biogenesis]
- COG2456 (11) rRNA maturation protein Rpf1, contains Brix/IMP4 (anticodon-binding) domain [Translation, ribosomal structure and biogenesis]
- COG2761 (6) Predicted dithiol-disulfide isomerase, DsbA family [Posttranslational modification, protein turnover, chaperones]
- COG2892 (25) tRNA threonylcarbamoyladenosine modification (KEOPS) complex, Pcc1 subunit [Translation, ribosomal structure and biogenesis]
- COG3153 (1) Predicted N-acetyltransferase YhbS [General function prediction only]
- COG3609 (6) Transcriptional regulator, contains Arc/MetJ-type RHH (ribbon-helix-helix) DNA-binding domain [Transcription]
- COG4352 (80) Ribosomal protein L13E [Translation, ribosomal structure and biogenesis]
- COG4585 (1) Signal transduction histidine kinase [Signal transduction mechanisms]
- pfam00672 (6) HAMP domain.
- pfam00827 (780) Ribosomal L15.
- pfam01119 (1) DNA mismatch repair protein, C-terminal domain.
- pfam01172 (1) Shwachman-Bodian-Diamond syndrome (SBDS) protein.
- pfam01226 (1) Formate/nitrite transporter.
- pfam01294 (1) Ribosomal protein L13e.
- pfam01368 (2) DHH family.
- pfam01451 (1) Low molecular weight phosphotyrosine protein phosphatase.
- pfam01595 (1) Domain of unknown function DUF21.
- pfam01624 (1) MutS domain I.
- pfam01780 (58) Ribosomal L37ae protein family.
- pfam01876 (70) RNase P subunit p30.
- pfam01877 (163) RNA binding.
- pfam01900 (136) Rpp14/Pop5 family.
- pfam01920 (6) Prefoldin subunit.
- pfam02592 (6) Putative vitamin uptake transporter.
- pfam02771 (1) Acyl-CoA dehydrogenase, N-terminal domain.
- pfam04087 (1) Domain of unknown function (DUF389).
- pfam05048 (3) Periplasmic copper-binding protein (NosD).

- pfam05639** (1) Pup-like protein. [EQ]
pfam06736 (3) Protein of unknown function (DUF1211).
pfam07705 (3) CARDB.
pfam08676 (1) MutL C terminal dimerisation domain.
pfam08753 (3) NikR C terminal nickel binding domain.
pfam09341 (23) Transcription factor Pcc1.
pfam09377 (1) SBDS protein C-terminal domain.
pfam12838 (5) 4Fe-4S dicluster domain.
pfam13187 (1) 4Fe-4S dicluster domain.
pfam13229 (3) Right handed beta helix region.
pfam13370 (1) 4Fe-4S single cluster domain of Ferredoxin I. [4Fe-4S]
pfam13462 (8) Thioredoxin.
pfam13508 (1) Acetyltransferase (GNAT) domain.
pfam14535 (2) AMP-binding enzyme C-terminal domain.
pfam16116 (3) Domain of unknown function (DUF4832).
PRK00095 (1) DNA mismatch repair protein; Reviewed
PRK00398 (35) DNA-directed RNA polymerase subunit P; Provisional
PRK00912 (296) ribonuclease P protein component 3; Provisional
PRK00933 (11) ribosomal biogenesis protein; Validated
PRK03717 (241) ribonuclease P protein component 2; Provisional
PRK03892 (2) ribonuclease P protein component 3; Provisional
PRK03973 (59) 50S ribosomal protein L37Ae; Reviewed
PRK03983 (19) exosome complex exonuclease Rrp41; Provisional
PRK03996 (77) proteasome subunit alpha; Provisional
PRK04163 (19) exosome complex RNA-binding protein Rrp4; Provisional
PRK04243 (927) 50S ribosomal protein L15e; Validated
PRK04282 (19) exosome complex RNA-binding protein Rrp42; Provisional
PRK04460 (6) nickel responsive regulator; Provisional
PRK05399 (1) DNA mismatch repair protein MutS; Provisional
PRK05427 (1) putative manganese-dependent inorganic pyrophosphatase; Provisional
PRK05658 (1) RNA polymerase sigma factor RpoD; Validated
PRK08671 (2) methionine aminopeptidase; Provisional
PRK08762 (10) molybdopterin biosynthesis protein MoeB; Validated
PRK09343 (3) prefoldin subunit beta; Provisional
PRK10089 (2) tRNA-binding protein; Provisional
PRK10935 (2) nitrate/nitrite sensor protein NarQ; Provisional
PRK12277 (81) 50S ribosomal protein L13e; Provisional
PRK13760 (76) putative RNA-associated protein; Provisional
PRK14538 (1) putative bifunctional signaling protein/50S ribosomal protein L9; Provisional
PRK14555 (267) hypothetical protein; Provisional
PRK14887 (2) KEOPS complex Pcc1-like subunit; Provisional
PRK14960 (3) DNA polymerase III subunits gamma and tau; Provisional
PRK15005 (4) universal stress protein F; Provisional
smart00283 (6) Methyl-accepting chemotaxis-like domains (chemotaxis sensory transducer).
smart00382 (1) ATPases associated with a variety of cellular activities.
smart00387 (1) Histidine kinase-like ATPases.
smart00533 (2) DNA-binding domain of DNA mismatch repair MUTS family.
smart00534 (2) ATPase domain of DNA mismatch repair MUTS family.
smart00579 (3) The Brix domain is found in a number of eukaryotic proteins.
smart00948 (2) Proteasome subunit A N-terminal signature Add an annotation.
TIGR00072 (3) hydrogenase maturation protease.
TIGR00341 (1) TIGR00341 family protein. [Hypothetical proteins, Conserved]
TIGR00691 (1) (p)ppGpp synthetase, RelA/SpoT family. [Cellular processes, Adaptations to atypical conditions]
TIGR00697 (6) conserved hypothetical integral membrane protein. [Hypothetical proteins, Conserved]
TIGR02338 (13) prefoldin, beta subunit, archaeal.
TIGR02356 (16) thiazole biosynthesis adenylyltransferase ThiF, E. [Biosynthesis of cofactors, prosthetic groups, and carriers, Thiamine]
TIGR02689 (1) arsenate reductase, glutathione/glutaredoxin type. [Cellular processes, Detoxification]
TIGR03520 (1) gliding motility-associated protein GldE.
TIGR04283 (1) transferase 2, rSAM/selenodomain-associated. [Unknown function, Enzymes of unknown specificity]

4.4 Multiple-sequence alignment

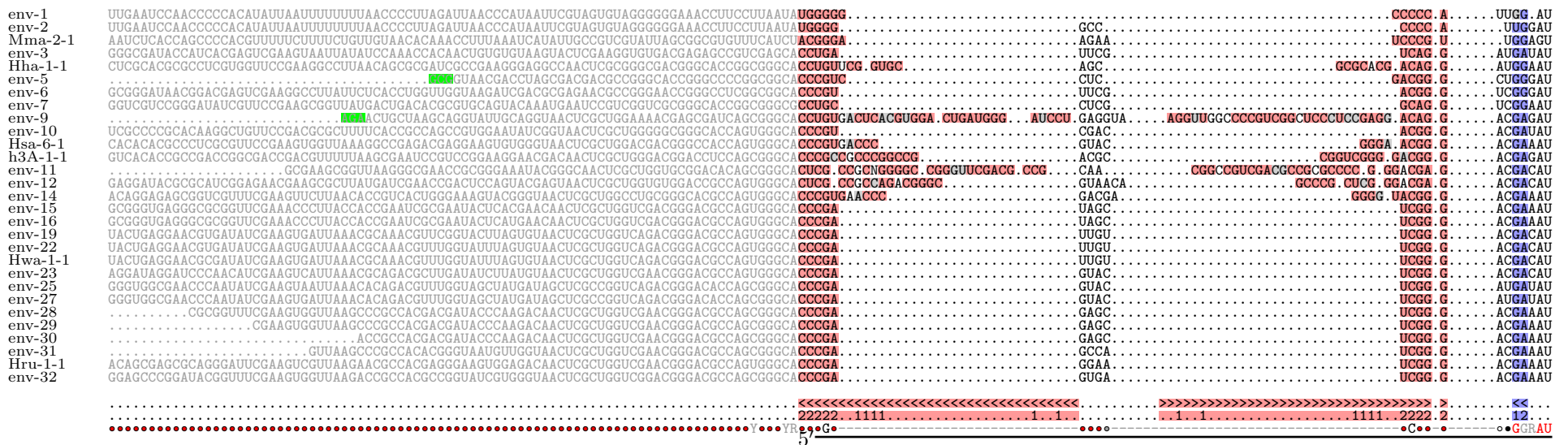
Each eL15-Euryarchaeota RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 4.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The eL15-Euryarchaeota RNA itself is denoted by the line underneath marked 5' and 3' on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded green. (Note: start codons are frequently misannotated, espe-

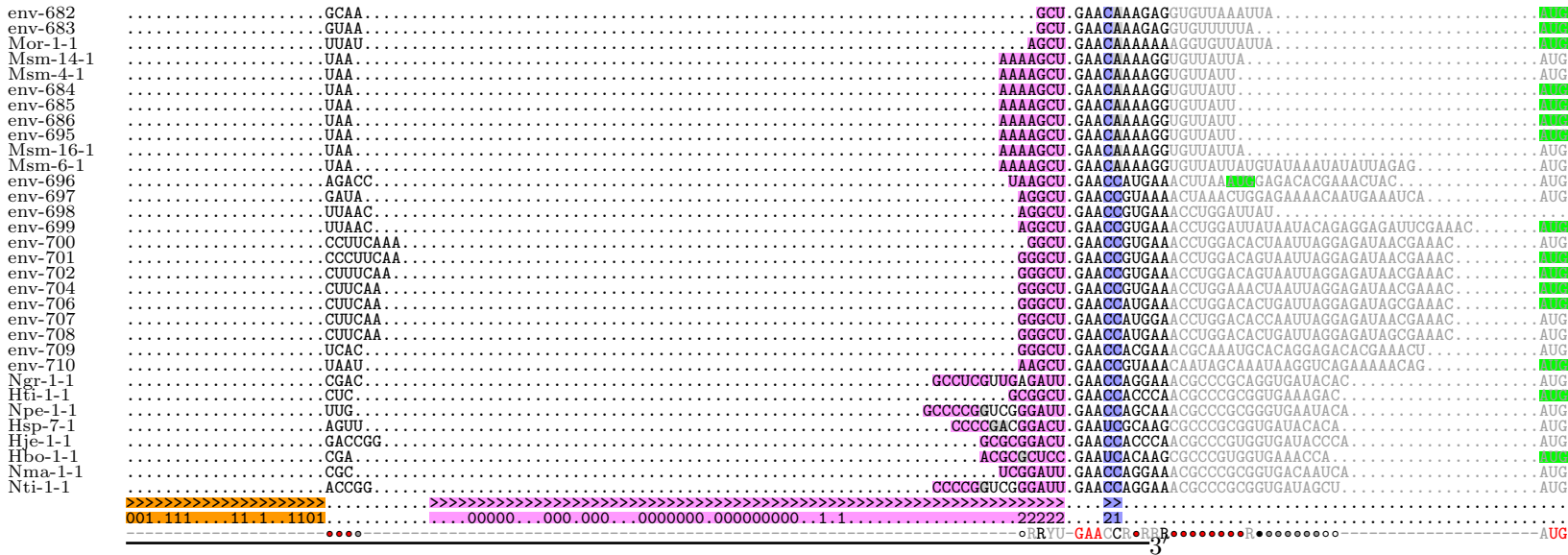
cially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-Crick or G-U pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, red nucleotides: nucleotide identity conserved more than 97% of the time, black nucleotides: 90%, gray nucleotides: 75%,

red circle (◉): nucleotide is present 97% of the time, black circle (◐): 90%, gray circle (◑): 97% conserved) assume that sequences have been weighted by the GSC algorithm (◉): 75%, white circle (○): 50%. All percentages of sequences just described (e.g. implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Hac-1-2, Hal-1-1, Hdi-1-1, Hdi-2-1, Hez-1-1, Hha-1-2, Hhi-1-1, Hhi-2-1, Hla-1-2, Hla-3-1, Hlu-1-1, Hme-1-2, Hpa-1-2, Hsa-3-1, Hsp-1-1, Hsp-4-1, Hsp-5-1, Hte-2-1, Hvo-1-1, Hwa-2-1, Mar-1-1, Mba-1-1, Mba-3-1, Mba-6-1, Mho-1-1, Mhu-1-1, Mma-3-10, Mma-3-11, Mma-3-12, Mma-3-13, Mma-3-14, Mma-3-15, Mma-3-16, Mma-3-17, Mma-3-18, Mma-3-19, Mma-3-2, Mma-3-20, Mma-3-21, Mma-3-22, Mma-3-23, Mma-3-24, Mma-3-25, Mma-3-26, Mma-3-27, Mma-3-28, Mma-3-29, Mma-3-3, Mma-3-30, Mma-3-31, Mma-3-32, Mma-3-33, Mma-3-34, Mma-3-35, Mma-3-36, Mma-3-37, Mma-3-38, Mma-3-39, Mma-3-4, Mma-3-40, Mma-3-41, Mma-3-42, Mma-3-43, Mma-3-44, Mma-3-45, Mma-3-46, Mma-3-47, Mma-3-48, Mma-3-49, Mma-3-5, Mma-3-50, Mma-3-51, Mma-3-52, Mma-3-53, Mma-3-54, Mma-3-55, Mma-3-56, Mma-3-6, Mma-3-7, Mma-3-8, Mma-3-9, Mma-4-1, Mma-5-1, Mma-6-1, Mma-7-1, Mma-8-1, Mma-9-1, Msm-1-1, Msm-10-1, Msm-11-1, Msm-12-1, Msm-13-1, Msm-15-1, Msm-17-1, Msm-18-1, Msm-19-1, Msm-2-1, Msm-20-1, Msm-21-1, Msm-22-1, Msm-23-1, Msm-3-1, Msm-5-1, Msm-7-1, Msm-8-1, Msm-9-1, Msp-10-1, Msp-11-1, Msp-12-1, Msp-15-1, Msp-6-1, Msp-8-1, Msp-9-1, Nal-1-1, Nsp-1-1, Nsp-2-1, Pfu-1-1, env-100, env-103, env-106, env-107, env-108, env-109, env-111, env-113, env-118, env-120, env-123, env-124, env-127, env-128, env-13, env-131, env-132, env-133, env-134, env-143, env-150, env-151, env-154, env-155, env-157, env-163, env-165, env-166, env-167, env-168, env-17, env-171, env-18, env-190, env-191, env-198, env-20, env-200, env-204, env-205, env-209, env-21, env-211, env-222, env-225, env-24, env-240, env-241, env-242, env-252, env-257, env-258, env-259, env-26, env-260, env-261, env-263, env-264, env-265, env-272, env-275, env-279, env-280, env-282, env-285, env-288, env-292, env-294, env-300, env-303, env-305, env-306, env-307, env-313, env-314, env-315, env-316, env-320, env-335, env-337, env-340, env-342, env-343, env-345, env-346, env-347, env-350, env-351, env-352, env-355, env-357, env-36, env-361, env-368, env-37, env-372, env-373, env-374, env-38, env-389, env-391, env-393, env-394, env-395, env-396, env-397, env-398, env-399, env-4, env-400, env-401, env-403, env-404, env-405, env-407, env-409, env-41, env-411, env-415, env-417, env-419, env-421, env-423, env-426, env-430, env-431, env-434, env-435, env-436, env-437, env-44, env-445, env-448, env-451, env-452, env-456, env-458, env-459, env-46, env-464, env-468, env-470, env-471, env-478, env-482, env-483, env-493, env-494, env-498, env-501, env-504, env-510, env-518, env-519, env-520, env-521, env-523, env-524, env-526, env-527, env-533, env-54, env-548, env-549, env-550, env-551, env-554, env-555, env-556, env-557, env-558, env-56, env-562, env-566, env-569, env-572, env-573, env-58, env-582, env-583, env-584, env-586, env-59, env-592, env-593, env-60, env-600, env-601, env-614, env-615, env-618, env-62, env-626, env-627, env-632, env-648, env-649, env-652, env-653, env-654, env-655, env-662, env-666, env-667, env-668, env-669, env-677, env-678, env-68, env-687, env-688, env-689, env-69, env-690, env-691, env-692, env-693, env-694, env-703, env-705, env-71, env-711, env-712, env-713, env-72, env-75, env-76, env-8, env-81, env-82, env-85, env-88, env-96, env-97, har-1-1

alignment positions 1 ... 180





5 L17-Actino-Proteobacteria

5.1 Taxa

The taxonomy of each organism containing a putative L17-Actino-Proteobacteria RNA is listed, with abbreviations identifying each hit (e.g., “Eco-1-1” and “Eco-1-2” might hypothetically represent two distinct RNAs in *E.*

coli). The abbreviations will be used to identify each individual L17-Actino-Proteobacteria RNA in Sections 5.3 and 5.5.

abbrev. of hits

taxonomy of species

Aal-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Propionibacterineae Nocardioideaceae <i>Actinopolymorpha alba</i> DSM 45243
Tbi-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Pseudonocardineae Pseudonocardiaceae <i>Thermobispora bispora</i> DSM 43833
Sac-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces acidiscabies</i> 84-104
Saf-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces afghaniensis</i> 772
Sal-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces albulus</i> CCRC 11814
Sal-2-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces albus</i> J1074
Sau-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces aurantiacus</i> JA 4570
Sau-2-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces auratus</i> AGR0001
Sav-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces avermitilis</i> MA-4680
Sbi-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces bingchenggensis</i> BCW-1
Sbo-1-1 to Sbo-1-2	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces bottropensis</i> ATCC 25435
Sca-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces canus</i> 299MFChir4.1
Sca-2-1 to Sca-2-2	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces cattleya</i> NRRL 8057 = DSM 46488
Sch-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces chartreusis</i> NRRL 12338
Scl-1-1 to Scl-1-2	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces clavuligerus</i> ATCC 27064
Sco-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces coelicoflavus</i> ZG0656
Sco-2-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces coelicolor</i> A3(2)
Sco-3-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces collinus</i> Tu 365
Sda-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces davawensis</i> JCM 4913
Sfi-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces flavogriseus</i> ATCC 33331
Sfu-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Streptomycineae Streptomycetaceae <i>Streptomyces fulvissimus</i> DSM 40593

Sga-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces gancidicus</i> BKS 13-15
Sgh-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces ghanaensis</i> ATCC 14672
Sgl-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces globisporus</i> C-1027
Sgr-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces griseoaurantiacus</i> M045
Sgr-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces griseoflavus</i> Tu4000
Sgr-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces griseus</i> subsp. <i>griseus</i> NBRC 13350
Sgr-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces griseus</i> XylebKG-1
Shy-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces hygrosopicus</i> ATCC 53653
Shy-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces hygrosopicus</i> subsp. <i>jinggangensis</i> 5008
Shy-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces hygrosopicus</i> subsp. <i>jinggangensis</i> TL01
Sip-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces ipomoeae</i> 91-03
Sli-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces lividans</i> 1326
Sli-2-1 to Sli-2-2	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces lividans</i> TK24
Smo-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces mobaraensis</i> NBRC 13819 = DSM 40847
Sni-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces niveus</i> NCIMB 11891
Spr-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces pristinaespiralis</i> ATCC 25486
Spr-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces prunicolor</i> NBRC 13075
Spu-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces purpureus</i> KA281
Sri-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces rimosus</i> subsp. <i>rimosus</i> ATCC 10970
Sro-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces roseochromogenes</i> subsp. <i>oscitans</i> DS 12.976
Sro-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces roseosporus</i> NRRL 15998
Ssc-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces scabiei</i> 87.22
Ssc-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces scabrisporus</i> DSM 41855
Sso-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces somaliensis</i> DSM 40738
Ssp-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. 303MFC05.2
Ssp-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. 351MFTsu5.1
Ssp-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. AA0539
Ssp-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. AA1529
Ssp-6-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. Amel2xE9
Ssp-5-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. ATexAB-D23
Ssp-7-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. BoleA5
Ssp-8-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. C
Ssp-17-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CcalMP-8W
Ssp-9-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNB091
Ssp-10-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNQ766
Ssp-11-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNS335
Ssp-12-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNS615
Ssp-13-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNT302
Ssp-14-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNT372
Ssp-15-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNY228
Ssp-16-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNY243
Ssp-18-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. DvalAA-83
Ssp-49-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. e14
Ssp-19-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. FxanaC1
Ssp-20-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. FxanaD5
Ssp-21-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. GBA 94-10
Ssp-22-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. HCCB10043
Ssp-23-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. HGB0020
Ssp-25-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. HmicA12
Ssp-24-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. HPH0547
Ssp-26-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. KhCrAH-244
Ssp-27-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. KhCrAH-340
Ssp-28-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. LaPpAH-108
Ssp-29-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. LaPpAH-165
Ssp-30-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. LaPpAH-202
Ssp-31-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. LaPpAH-95
Ssp-32-1 to Ssp-32-2	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. Mg1
Ssp-33-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. MspMP-M5
Ssp-34-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. PAMC26508
Ssp-36-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. PsTaAH-124
Ssp-35-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. PVA 94-07
Ssp-37-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. R1-NS-10
Ssp-38-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. S4
Ssp-39-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. SA3_actF
Ssp-40-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. SA3_actG

Ssp-44-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. ScaeMP-e10
Ssp-45-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. SirexAA-E
Ssp-41-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. SPB74
Ssp-42-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. SPB78
Ssp-43-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. SS
Ssp-46-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. TOR3209
Ssp-47-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. Tu6071
Ssp-48-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. W007
Ssu-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces sulphureus</i> DSM 40104
Ssu-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces sulphureus</i> L180
Ssv-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces sviceus</i> ATCC 29083
Sts-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces tsukubaensis</i> NRRL18488
Stu-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces turgidiscabies</i> Car8
Sve-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces venezuelae</i> ATCC 10712
Svi-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces violaceusniger</i> SPC6
Svi-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces violaceusniger</i> Tu 4113
Svi-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces viridochromogenes</i> DSM 40736
Svi-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces viridochromogenes</i> Tue57
Svi-5-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces viridosporus</i> T7A
Svi-6-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces vitaminophilus</i> DSM 41686
Szi-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces zinciresistens</i> K42
Sba-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces bacterium</i> MP113-05
Nco-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptosporangineae	Streptosporangiaceae	<i>Nonomuraea coxensis</i> DSM 45129
Sro-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptosporangineae	Streptosporangiaceae	<i>Streptosporangium roseum</i> DSM 43021
Aat-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptosporangineae	Thermomonosporaceae	<i>Actinomadura atramentaria</i> DSM 43919
Afl-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptosporangineae	Thermomonosporaceae	<i>Actinomadura flavalba</i> DSM 45200
Aac-1-1	Bacteria	Actinobacteria	Catenulisporales	Actinospicaceae	<i>Actinospica acidiphila</i>		
Nal-1-1	Bacteria	Actinobacteriales	Nocardioideae	Nocardioideae	<i>Nocardioides alkalitolerans</i>	DSM 16699	
Nha-1-1	Bacteria	Actinobacteriales	Nocardioideae	Nocardioideae	<i>Nocardioides halotolerans</i>	DSM 19273	
Nin-1-1	Bacteria	Actinobacteriales	Nocardioideae	Nocardioideae	<i>Nocardioides insulae</i>	DSM 17944	
Nlu-1-1	Bacteria	Actinobacteriales	Nocardioideae	Nocardioideae	<i>Nocardioides luteus</i>		
Nsp-1-1	Bacteria	Actinobacteriales	Nocardioideae	Nocardioideae	<i>Nocardioides</i> sp. J54		
Nsp-2-1	Bacteria	Actinobacteriales	Nocardioideae	Nocardioideae	<i>Nocardioides</i> sp. URHA0020		
Nsp-3-1	Bacteria	Actinobacteriales	Nocardioideae	Nocardioideae	<i>Nocardioides</i> sp. URHA0032		
Psi-1-1	Bacteria	Actinobacteriales	Nocardioideae	Nocardioideae	<i>Pimelobacter simplex</i>		
Ssp-50-1	Bacteria	Actinobacteria	Pseudonocardiales	Pseudonocardiaeae	<i>Saccharothrix</i> sp. ST-888		
Kau-1-1 to Kau-1-2	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Kitasatospora aureofaciens</i>		
Kaz-1-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Kitasatospora azatica</i>	KCTC 9699	
Kme-1-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Kitasatospora mediocidica</i>	KCTC 9733	
Kph-1-1 to Kph-1-2	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Kitasatospora phosalacinea</i>		
Kpu-1-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Kitasatospora purpeofusca</i>		
Ksp-1-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Kitasatospora</i> sp. MBT63		
Ksp-2-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Kitasatospora</i> sp. MBT66		
Ksp-3-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Kitasatospora</i> sp. MY 5-36		
Ksp-4-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Kitasatospora</i> sp. NRRL B-11411		
Sal-3-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptacidiphilus albus</i>		
Sal-4-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptacidiphilus albus</i>	JL83	
Sca-3-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptacidiphilus carbonis</i>		
Sje-1-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptacidiphilus jeojiense</i>		
Sor-1-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptacidiphilus oryzae</i>	TH49	
[pa-1-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces</i> [Kitasatospora] papulosa		
Asp-1-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces Actinosporangium</i> sp. NRRL B-3428		
Sac-2-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces achromogenes</i> subsp. <i>achromogenes</i>		
Sac-3-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces acidiscabies</i>		
Sah-1-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces ahyyroscopicus</i> subsp. <i>wuyiensis</i>		
Sal-5-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces</i> <i>Streptomyces</i> albidoflavus group <i>Streptomyces albidoflavus</i>		
Sal-6-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces alboflavus</i>		
Sal-7-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces albovidis</i>		
Sal-8-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces albulus</i>		
Sal-9-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces albulus</i> PD-1		
Sal-10-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces albulus</i> ZPM		
Sal-11-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces albus</i>		
Sal-12-1 to Sal-12-5	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces albus</i> subsp. <i>albus</i>		
Sam-1-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces ambofaciens</i>	ATCC 23877	
San-1-1	Bacteria	Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces antibioticus</i>		

San-2-1 to San-2-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces anulatus</i>
Sat-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces atratus</i>
Sat-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces atroolivaceus</i>
Sau-3-1 to Sau-3-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces aureocirculatus</i>
Sau-4-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces aureus</i>
Sav-2-1 to Sav-2-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces avermitilis</i> MA-4680 = NBRC 14893
Sav-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces avicenniae</i>
Sba-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces baarnensis</i>
Sbi-2-1 to Sbi-2-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces bicolor</i>
Sbi-3-1 to Sbi-3-3	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces bikiniensis</i>
Sbr-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces brasiliensis</i>
Sca-4-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces caatingaensis</i>
Sca-5-1 to Sca-5-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces californicus</i>
Sca-6-1 to Sca-6-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces capuensis</i>
Sca-7-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces catenulae</i>
Sce-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces celluloflavus</i>
Sce-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces cellulosa</i>
Scy-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces cyaneofuscatus</i>
Scy-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces cyaneogriseus</i> subsp. <i>noncyanogenus</i>
Sde-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces decoyicus</i>
Sdu-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces durhamensis</i>
Ser-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces erythrochromogenes</i>
Seu-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces europaeiscabiei</i>
Sex-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces exfoliatus</i>
Sex-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces exfoliatus</i> DSM 41693
Sfl-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flaveolus</i>
Sfl-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flaveus</i>
Sfl-4-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flavidovirens</i> DSM 40150
Sfl-5-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flavochromogenes</i>
Sfl-6-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flavotricini</i>
Sfl-7-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flavovariabilis</i>
Sfl-8-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flavovirens</i>
Sfl-9-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces floridae</i>
Sfr-1-1 to Sfr-1-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces fradiae</i>
Sfu-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces fulvoviolaceus</i>
Sfu-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces fulvoviridis</i>
Sga-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces galbus</i>
Sgl-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces glaucescens</i>
Sgl-3-1 to Sgl-3-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces globisporus</i> subsp. <i>globisporus</i>
Sgr-5-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces graminis</i>
Sgr-6-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseoflavus</i>
Sgr-7-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseofuscus</i>
Sgr-8-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseolus</i>
Sgr-9-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseoluteus</i>
Sgr-10-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseorubens</i>
Sgr-11-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseus</i>
Sgr-12-1 to Sgr-12-9	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseus</i> subsp. <i>griseus</i>
Sgr-13-1 to Sgr-13-5	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseus</i> subsp. <i>rhodochrous</i>
Sha-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces halstedii</i>
Shy-4-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces hygrosopicus</i> subsp. <i>hygrosopicus</i>
Sia-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces iakyrus</i>
Sir-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces iranensis</i>
Ska-1-1 to Ska-1-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces katrae</i>
Sla-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces lavendulae</i>
Sla-2-1 to Sla-2-4	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces lavendulae</i> subsp. <i>lavendulae</i>
Sla-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces lavenduligriseus</i>
Sle-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces leeuwenhoekii</i>
Sli-2-1 to Sli-2-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces lividans</i> TK24
Slu-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces luteus</i>
Sly-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces lydicus</i>
Sly-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces lydicus</i> A02
Sme-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces mediolani</i>
Sme-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces megasporus</i>
Smi-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces mirabilis</i>
Smo-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces monomycini</i>

Sna-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces natalensis</i>
Sna-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces natalensis</i> ATCC 27448
Sni-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces niger</i>
Sno-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces nodosus</i>
Sno-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces novaecaesareae</i>
Soc-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces ochraceiscleroticus</i>
Sod-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces odonnellii</i>
Sol-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces olindensis</i>
Sol-2-1 to Sol-2-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces olivaceus</i>
Spe-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces peruviansis</i>
Spe-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces peucetius</i>
Spl-1-1 to Spl-1-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces pluripotens</i>
Spu-2-1 to Spu-2-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces puniceus</i>
Spu-3-1 to Spu-3-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces purpeochromogenes</i>
Spy-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces pyridomyceticus</i>
Sre-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces resistomycificus</i>
Sri-2-1 to Sri-2-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces rimosus</i>
Sri-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces rimosus</i> R6-500
Sri-4-1 to Sri-4-20	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces rimosus subsp. rimosus</i>
Sro-4-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces roseosporus</i> NRRL 11379
Sro-5-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces roseovorticillatus</i>
Sro-6-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces roseus</i>
Sru-1-1 to Sru-1-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces ruber</i>
Ssc-3-1 to Ssc-3-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces scabiei</i>
Ssc-4-1 to Ssc-4-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sclerotialis</i>
Ssc-5-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces scopuliridis</i> RB72
Sse-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces seoulensis</i>
Ssp-51-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> 142MFCol3.1
Ssp-52-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> 150FB
Ssp-53-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> 769
Ssp-55-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> AcH 505
Ssp-54-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> AW19M42
Ssp-56-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNH099
Ssp-57-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNH189
Ssp-58-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNH287
Ssp-59-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNQ-509
Ssp-60-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNQ-525
Ssp-61-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNQ329
Ssp-62-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNQ431
Ssp-63-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNQ865
Ssp-64-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNR698
Ssp-65-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNS606
Ssp-66-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNS654
Ssp-67-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNT318
Ssp-68-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNT360
Ssp-69-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNT371
Ssp-70-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CT34
Ssp-71-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> DpondAA-B6
Ssp-73-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> FxanaA7
Ssp-72-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> FXJ7.023
Ssp-74-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> GXT6
Ssp-75-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> HNS054
Ssp-76-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> JS01
Ssp-77-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> KE1
Ssp-78-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> KhCrAH-337
Ssp-79-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> KhCrAH-40
Ssp-80-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> M10
Ssp-81-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MBT28
Ssp-32-1 to Ssp-32-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> Mg1
Ssp-82-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MNU77
Ssp-83-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MUSC 125
Ssp-84-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MUSC119T
Ssp-85-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MUSC136T
Ssp-86-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MUSC149T
Ssp-87-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MUSC164

Ssp-153-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-31
Ssp-154-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-325
Ssp-155-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-337
Ssp-156-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-340
Ssp-157-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-350
Ssp-158-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-37
Ssp-159-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-378
Ssp-160-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-384
Ssp-161-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-455
Ssp-162-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-474
Ssp-163-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-475
Ssp-164-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-481
Ssp-165-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-495
Ssp-166-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-515
Ssp-167-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-575
Ssp-168-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-623
Ssp-169-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-646
Ssp-170-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-813
Ssp-171-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-87
Ssp-172-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-920
Ssp-173-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL S-98
Ssp-174-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3540
Ssp-175-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3549
Ssp-176-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3626
Ssp-177-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3641
Ssp-178-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3683
Ssp-179-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3702
Ssp-180-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3703
Ssp-181-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3719
Ssp-182-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3725
Ssp-183-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3742
Ssp-184-1 to Ssp-184-2	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3744
Ssp-185-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3773
Ssp-186-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3774
Ssp-187-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NRRL WC-3795
Ssp-188-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	NTK 937
Ssp-189-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	PCS3-D2
Ssp-190-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	PRh5
Ssp-191-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	RSD-27
Ssp-192-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	SBT349
Ssp-193-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	SolWspMP-sol2th
Ssp-194-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	TAA040
Ssp-195-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	TAA204
Ssp-196-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	Tu 6176
Ssp-197-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	UNC401CLCol
Ssp-198-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	URHA0041
Ssp-199-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	WM6386
Ssp-200-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	WM6391
Ssp-201-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces</i> sp.	WM6391
Sst-1-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces stelliscabiei</i>	
Sto-1-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces toyocaensis</i>	
Sva-1-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces variegatus</i>	
Sva-2-1 to Sva-2-2	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces varsoviensis</i>	
Svi-7-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces vietnamensis</i>	
Svi-8-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces vinaceus</i>	
Svi-9-1 to Svi-9-2	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces violaceoruber</i>	
Svi-10-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces violaceorubidus</i>	
Svi-11-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces violens</i>	
Svi-12-1 to Svi-12-3	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces virginiae</i>	
Svi-13-1 to Svi-13-4	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces viridochromogenes</i>	
Swa-1-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces wadayamensis</i>	
Swe-1-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces wedmorensis</i>	
Sxa-1-1 to Sxa-1-2	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces xanthophaeus</i>	
Sxi-1-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces xiamenensis</i>	
Sxi-2-1	Bacteria Actinobacteria Streptomyetales Streptomycetaceae	<i>Streptomyces xinghaiensis</i>	S187

Sxy-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces xylophagus</i>
Sya-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces yangpuensis</i>
Sye-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces yeochonensis</i> CN732
Sye-2-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces yerevanensis</i>
Hcr-1-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Herbidospora cretacea</i>
Mro-1-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Microbispora rosea</i> subsp. <i>nonnitritogenes</i>
Msp-1-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Microbispora</i> sp. ATCC PTA-5024
Mgl-1-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Microtetraspora glauca</i>
Nca-1-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Nonomuraea candida</i>
Nsp-4-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Nonomuraea</i> sp. SBT364
Sam-2-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Streptosporangium amethystogenes</i>
Sro-7-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Streptosporangium roseum</i>
Ama-1-1	Bacteria Actinobacteria Streptosporangiales Thermomonosporaceae	<i>Actinomadura madurae</i> LIID-AJ290
Ari-1-1	Bacteria Actinobacteria Streptosporangiales Thermomonosporaceae	<i>Actinomadura rifamycini</i> DSM 43936
Sal-13-1	Bacteria Actinobacteria Streptosporangiales Thermomonosporaceae	<i>Spirillospora albida</i>
[br-1-1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales	[Polyangium] <i>brachysporum</i>
Rge-1-1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales	<i>Rubrivivax gelatinosus</i> CBS
Age-1-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Archangiaceae <i>Archangium gephyra</i>
Avi-1-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Archangiaceae <i>Archangium violaceum</i> Cb vi76
Hmi-1-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Archangiaceae <i>Hyalangium minutum</i>
Cfu-1-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Cystobacteraceae <i>Cystobacter fuscus</i> DSM 2262
Sau-5-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Cystobacteraceae <i>Stigmatella aurantiaca</i> DW4/3-1
Cco-1-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Myxococcaceae <i>Corallocooccus coralloides</i> DSM 2259
Mfu-1-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Myxococcaceae <i>Myxococcus fulvus</i> 124B02
Mfu-2-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Myxococcaceae <i>Myxococcus fulvus</i> HW-1
Mha-1-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Myxococcaceae <i>Myxococcus hansupus</i>
Msp-2-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Myxococcaceae <i>Myxococcus</i> sp. (contaminant ex DSM 436)
Mst-1-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Myxococcaceae <i>Myxococcus stipitatus</i> DSM 14675
Mxa-1-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Myxococcaceae <i>Myxococcus xanthus</i> DK 1622
Mxa-2-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Myxococcaceae <i>Myxococcus xanthus</i> DZ2
Mxa-3-1	Bacteria Proteobacteria Deltaproteobacteria Myxococcales	Cystobacterineae Myxococcaceae <i>Myxococcus xanthus</i> DZF1
env-1 to env-41	environmental samples	

5.2 Notes

Superscript numbers are used to annotate any L17-Actino-Proteobacteria RNA that has special characteristics (described below). These numeric annotations will

¹ Left hairpin does not conform well to the characteristics of those in most other

5.3 Gene contexts

Each L17-Actino-Proteobacteria RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one L17-Actino-Proteobacteria RNA are assigned a color; other domains are gray. Information about these conserved domains is given in Section 5.4. The accession of the se-

quences will be used in Sections 5.3 and 5.5. The meaning of the numbers are as follows.

sequences.

quence containing each L17-Actino-Proteobacteria RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5’ and 3’ boundaries of each L17-Actino-Proteobacteria RNA. If the 5’ coordinate is greater than the 3’ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 5.1. (Superscript numbers refer to annotations listed in Section 5.2)

abbrev.	Seq. accession	5' at	3' at	genes
env-1	C687J26621_10007310	-	562	514 RNA→ RplQ (COG0203)rplQ (PRK05591)→ hypo→
env-2	C687J26621_10071554	-	1140	1092 RNA→ hypo→ RplQ (COG0203)rplQ (PRK05591)→ hypo→ hypo→
[br-1-1	NZ_CP011371.1	-	5726771	5726711 RNA→ RplQ (COG0203)rplQ (PRK05591)→
env-3	soil_Contig5330	+	734	782 RNA→ RplQ (COG0203)rplQ (PRK05591)→ hypo→ hypo→ hypo→
Nal-1-1	NZ_AUFN01000013.1	-	290198	290141 RNA→ RplQ (COG0203)rplQ (PRK05591)→ hypo→
Nsp-1-1	NZ_JAER01000028.1	+	47081	47133 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Mxa-1-1	NC_008095.1	+	3870176	3870231 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Mxa-2-1	NZ_AKYI02000032.1	+	15862	15917 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Mxa-3-1	NZ_AOBT01000010.1	-	325703	325648 RNA→ RplQ (COG0203)rplQ (PRK05591)→
env-4	G312J29652_10012153	-	190	133 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Cfu-1-1	NZ_ANAH02000033.1	-	26146	26089 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Avi-1-1	NZ_JPMI01000295.1	+	16333	16389 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Age-1-1	NZ_CP011509.1	+	5915327	5915383 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Hmi-1-1	NZ_JMCB01000003.1	+	16437	16494 RNA→ RplQ (COG0203)rplQ (PRK05591)→
env-5	JGI12467J12023_1013060	+	231	287 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Sau-5-1	NC_014623.1	+	4510803	4510859 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Mfu-1-1	NZ_CP006003.1	-	6488472	6488416 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Mst-1-1	NC_020126.1	-	5952427	5952371 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Msp-2-1	NZ_AKXT02000011.1	-	416054	415998 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Mha-1-1	NZ_CP012109.1	-	4586241	4586185 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Mfu-2-1	NC_015711.1	+	5782024	5782080 RNA→ RplQ (COG0203)rplQ (PRK05591)→
env-6	JGI12467J12023_1015101	+	1120	1177 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Cco-1-1	NC_017030.1	+	3764344	3764400 RNA→ RplQ (COG0203)rplQ (PRK05591)→
env-7	SRB_FXPBX6M01ETLHE	-	521	467 RNA→ RplQ (COG0203)rplQ (PRK05591)→
env-8	LWAnN_GIDYKCY01AF5CK	-	393	338 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Ama-1-1	NZ_AWOO02000003.1	-	173008	172954 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→
env-9	topACOD_F95O9CU02FUYYO	+	189	240 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→
env-10	botACOD_contig00616	+	47	98 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649)→ AAA (smart00382)Uup (COG0488)ABC_tran_Xtn (pfam12848)→
Ssp-68-1	NZ_AUKO01000030.1	+	121030	121087 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→
¹ env-11	topACOD_F95O9CU01C589N	-	233	171 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→
env-12	DCrCPGB_c521527	+	223	278 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Ssp-96-1	NZ_JOAI01000002.1	-	176853	176802 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ksp-1-1	NZ_JAIZ01000648.1	-	13562	13510 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ AAA (smart00382)Uup (COG0488)→
Kme-1-1	NZ_JQLN01000005.1	+	2502927	2502979 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ AAA (smart00382)Uup (COG0488)AAA_21 (pfam13304)→
Rge-1-1	NZ_AJFF01000004.1	+	16232	16281 RNA→ RplQ (COG0203)rplQ (PRK05591)→
Sca-3-1	NZ_BBPM01000018.1	-	109868	109813 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sal-3-1	NZ_BBPL01000005.1	+	86334	86389 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→
Sal-4-1	NZ_JQML01000001.1	+	5666634	5666689 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→
env-13	JGI24770J26754_10005505	-	4344	4287 RNA→ RplQ (COG0203)rplQ (PRK05591)PRK11855 (PRK11855)→ PRK09434 (PRK09434)bac_FRK (cd01167)→ CarboxypepD_reg (pfam13620)→
Sav-3-1	NZ_JOEK01000005.1	-	58397	58339 RNA→ RplQ (COG0203)rplQ (PRK05591)→
¹ Ssp-195-1	NZ_AUKW01000004.1	-	554930	554861 RNA→ PRK13428 (PRK13428)rplQ (PRK05591)Ribosomal_L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Nsp-4-1	NZ_LAVL01000256.1	-	2722	2668 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
env-14	botACOD_F64RS5002G1132	+	29	84 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→
Nco-1-1	NZ_KB903951.1	-	119743	119681 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sje-1-1	NZ_JOEH01000005.1	-	70730	70674 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Kaz-1-1	NZ_JQMO01000003.1	+	3548080	3548135 RNA→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→

Kph-1-1	NZ_JNWZ01000014.1	-	38553	38499	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) → AAA (smart00382) Uup (COG0488) →
Kph-1-2	NZ_JNYE01000006.1	+	139183	139237	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Sno-2-1	NZ_JNWQ01000041.1	-	6189	6134	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Ksp-3-1	NZ_LFVW01000009.1	+	42129	42184	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) → AAA (smart00382) Uup (COG0488) AAA_21 (pfam13304) →
Spy-1-1	NZ_KL573373.1	+	195480	195535	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Ksp-4-1	NZ_JOGH01000001.1	-	191862	191808	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) → AAA (smart00382) Uup (COG0488) →
Ssp-165-1	NZ_JZWY01000017.1	-	18645	18591	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Ssp-133-1	NZ_JOHN01000002.1	+	49938	49992	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) → AAA (smart00382) Uup (COG0488) →
Ssp-50-1	NZ_JYJF01000115.1	-	10192	10138	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-157-1	NZ_JOHO01000003.1	+	268650	268704	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) → AAA (smart00382) Uup (COG0488) AAA_21 (pfam13304) →
Ssp-160-1	NZ_JOJA01000001.1	+	115341	115395	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ksp-2-1	NZ_JAIY01000008.1	-	87931	87877	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) → AAA (smart00382) Uup (COG0488) →
Kpu-1-1	NZ_JODS01000006.1	+	94156	94210	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Ssp-183-1	NZ_JOCF01000001.1	-	67177	67123	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) → AAA (smart00382) Uup (COG0488) AAA_21 (pfam13304) →
Sam-2-1	NZ_JOEQ01000010.1	-	266003	265948	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sro-7-1	NZ_JOEP01000065.1	+	28073	28126	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-87-1	NZ_LAKD01000081.1	+	62702	62751	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-190-1	NZ_JABQ01000020.1	+	41705	41754	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sir-1-1	NZ_LK022848.1	-	5397417	5397368	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Shy-4-1	NZ_JOIK01000025.1	+	178719	178768	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sro-3-1	NC_013595.1	+	1131580	1131634	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Nin-1-1	NZ_KE383928.1	+	830235	830308	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Nca-1-1	NZ_JOAG01000016.1	+	29392	29446	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
¹ Ssp-192-1	NZ_LAVK01000035.1	+	24842	24902	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-172-1	NZ_JODF01000016.1	-	82667	82612	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-93-1	NZ_JOJM01000060.1	-	2808	2751	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Sau-3-1	NZ_JOAP01000029.1	+	78987	79043	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Sau-3-2	NZ_JOAR01000028.1	+	78983	79039	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Sal-6-1	NZ_JNXT01000010.1	-	3945	3889	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sru-1-1	NZ_JODN01000016.1	-	4008	3952	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sru-1-2	NZ_JOAQ01000016.1	-	4052	3996	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sau-1-1	NZ_AOPZ01000478.1	-	3734	3676	RNA → ←-hypo
Ssp-106-1	NZ_JOIG01000009.1	-	261110	261058	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sxi-1-1	NZ_CP009922.2	-	2234636	2234584	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-3-1	NZ_ALNP01000008.1	+	75229	75281	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
env-15	JGI12419J13241_1048700	+	807	860	RNA →
env-16	JGI12341J12878_1001749	+	4790	4843	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
env-17	JGI12298J13902_1000008	-	41137	41084	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Tbi-1-1	NC_014165.1	+	644331	644384	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
env-18	JGI12419J13241_1045219	-	901	848	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Ssp-118-1	NZ_JOFZ01000006.1	-	529759	529704	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
env-19	2200133452	+	1231	1291	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
env-20	2200130945	-	4098	4038	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
env-21	JGI12419J13241_1059560	-	305	245	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Sor-1-1	NZ_JQM01000005.1	+	4289657	4289704	RNA → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-64-1	NZ_AZXC01000006.1	-	241043	240986	RNA → rplQ (PRK05591) rpsP (PRK14521) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →

Ssp-12-1	NZ_KB846744.1	-	49103	49046	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-13-1	NZ_KB898271.1	-	505841	505784	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-61-1	NZ_AXVU01000018.1	-	122599	122542	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-59-1	NZ_CP011492.1	+	4931209	4931266	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-16-1	NZ_KB897717.1	-	411625	411568	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-10-1	NZ_KB897364.1	-	373832	373775	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-11-1	NZ_KB897623.1	+	230842	230899	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-63-1	NZ_AUKP01000008.1	+	18089	18146	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-60-1	NZ_JNID01000001.1	+	69239	69296	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-69-1	NZ_AZWW01000009.1	-	266579	266522	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-56-1	NZ_AZWL01000015.1	-	17420	17364	hypo→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Hcr-1-1	NZ_JODQ01000002.1	-	560025	559979	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Msp-1-1	NZ_KI866524.1	-	954571	954521	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Mro-1-1	NZ_JNZQ01000013.1	+	26247	26297	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-171-1	NZ_JOGB01000027.1	-	2040	1986	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-43-1	NZ_JH941042.1	+	296021	296076	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Svi-13-1	NZ_LGUP01000370.1	-	89952	89897	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Swe-1-1	NZ_JNWK01000006.1	-	89924	89869	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-73-1	NZ_LACL01000017.1	+	268699	268754	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssc-3-1	NZ_KL997422.1	+	626325	626380	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Kau-1-1	NZ_JODU01000011.1	-	303136	303081	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sgr-1-1	NZ_AEYX01000036.1	-	159801	159746	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sto-1-1	NZ_JFCB01000003.1	+	275848	275903	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-114-1	NZ_JOHW01000009.1	-	153796	153741	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssc-4-1	NZ_JODX01000002.1	+	54572	54627	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-1-1	NZ_KB911732.1	-	106280	106225	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sau-4-1	NZ_KL647039.1	-	228013	227958	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Spr-1-1	NZ_CM000950.1	-	3302692	3302637	RNA→	hypo→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ hypo→	
Ssp-189-1	NZ_JDUZ01000002.1	+	233594	233648	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ AAA (smart00382)Uup (COG0488)AAA_21 (pfam13304)→ DUF2029 (pfam09594)→
Sfl-6-1	NZ_JNXV01000034.1	+	16887	16941	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-103-1	NZ_JOFX01000039.1	+	152601	152655	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-111-1	NZ_JYJI01000223.1	+	17460	17514	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-159-1	NZ_JOBX01000009.1	+	138190	138244	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ser-1-1	NZ_JNZG01000024.1	+	137960	138014	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ AAA (smart00382)Uup (COG0488)AAA_21 (pfam13304)→ DUF2029 (pfam09594)→
Sya-1-1	NZ_LBMK01000005.1	-	318921	318867	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Svi-12-1	NZ_LGUV01000155.1	-	24360	24306	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ AAA (smart00382)Uup (COG0488)AAA_21 (pfam13304)→ DUF2029 (pfam09594)→
Ssp-151-1	NZ_JOCY01000032.1	-	24441	24387	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ AAA (smart00382)Uup (COG0488)AAA_21 (pfam13304)→ DUF2029 (pfam09594)→
Ssp-110-1	NZ_JOFY01000047.1	-	27927	27873	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ AAA (smart00382)Uup (COG0488)AAA_21 (pfam13304)→ DUF2029 (pfam09594)→
Ssp-112-1	NZ_JOIB01000007.1	+	127472	127526	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ AAA (smart00382)Uup (COG0488)AAA_21 (pfam13304)→ DUF2029 (pfam09594)→
Ssp-102-1	NZ_JOIR01000010.1	+	206080	206134	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ AAA (smart00382)Uup (COG0488)AAA_21 (pfam13304)→ DUF2029 (pfam09594)→
Sla-2-1	NZ_JOB01000029.1	+	79242	79296	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-92-1	NZ_JOHF01000013.1	+	131540	131594	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-139-1	NZ_JZWW01000181.1	-	23883	23829	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-173-1	NZ_JOJD01000018.1	-	24958	24904	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	

Svi-12-2	NZ_JOAK01000021.1	-	24986	24932	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-8-1	NZ_GG657750.1	+	4667597	4667651	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Svi-7-1	NZ_CP010407.1	+	5084066	5084122	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-12-1	NZ_JNZT01000074.1	-	4616	4560	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-12-2	NZ_JOEN01000002.1	-	181210	181154	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sfl-5-1	NZ_JNZO01000012.1	-	190895	190839	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sbi-3-1	NZ_JNWL01000008.1	+	233987	234043	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sbi-3-2	NZ_JOAU01000005.1	+	321503	321559	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sbi-3-3	NZ_JNXJ01000008.1	+	234102	234158	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sex-1-1	NZ_KL647056.1	+	327108	327164	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgl-3-1	NZ_JODW01000006.1	-	235779	235723	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-9-1	NZ_JOBE01000026.1	+	78758	78814	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-121-1	NZ_JOGW01000078.1	+	27510	27566	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sve-1-1	NC_018750.1	+	4750596	4750652	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sav-2-1	NZ_JZJK01000077.1	-	121007	120951	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sav-1-1	NC_003155.4	+	6003039	6003095	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sav-2-2	NZ_BAVY01000021.1	-	121478	121422	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Mgl-1-1	NZ_JOFO01000009.1	+	79442	79498	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Asp-1-1	NZ_JOGW01000014.1	-	37012	36956	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Stu-1-1	NZ_AEJB01000201.1	-	20150	20094	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sye-2-1	NZ_JNWJ01000097.1	+	561	617	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sdu-1-1	NZ_JNXR01000027.1	+	434	490	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgh-1-1	NZ_DS999641.1	-	3242980	3242924	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
						PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Svi-5-1	NZ_JH993790.1	-	1541255	1541199	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-153-1	NZ_JOCB01000058.1	+	23941	23997	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-86-1	NZ_LAVA01000018.1	+	78943	78999	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sro-1-1	NZ_CM002285.1	-	3697722	3697666	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-7-1	NZ_JOFU01000024.1	+	46860	46916	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-28-1	NZ_KB891987.1	+	241284	241340	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-176-1	NZ_JOCA01000010.1	+	82614	82670	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-14-1	NZ_KB897780.1	-	288156	288100	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sac-2-1	NZ_JODT01000001.1	-	203810	203754	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sbo-1-1	NZ_KB405078.1	-	1073332	1073276	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sbo-1-2	NZ_KB911581.1	+	1052469	1052525	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-2-1	NZ_KB911779.1	-	228049	227993	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-98-1	NZ_JOGP01000006.1	-	287417	287361	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sac-3-1	NZ_KQ257828.1	+	111389	111445	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sac-1-1	NZ_AHBF01000045.1	-	10486	10430	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
						PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sca-7-1	NZ_JODY01000013.1	-	8155	8099	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-2-1	NZ_GG657758.1	-	3229434	3229378	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-105-1	NZ_JOIF01000015.1	+	61537	61593	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-85-1	NZ_LBDA01000016.1	+	39978	40034	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sco-3-1	NC_021985.1	+	5098374	5098430	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sse-1-1	NZ_JNXP01000008.1	-	210569	210513	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sre-1-1	NZ_KL575664.1	-	76522	76466	RNA→	RplQ (COG0203)rplQ (PRK05591)→	
Spe-1-1	NZ_KL575016.1	+	244282	244340	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sbi-2-1	NZ_JOFS01000017.1	-	10150	10092	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sbi-2-2	NZ_JOFR01000006.1	-	10415	10357	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-83-1	NZ_JUIG01000050.1	-	40198	40142	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Spl-1-1	NZ_JTDH01000075.1	-	3887	3831	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Spl-1-2	NZ_JUIF01000014.1	-	27221	27165	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→

Sno-1-1	NZ_CP009313.1	+	4387573	4387629	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
San-1-1	NZ_LGUX01000327.1	+	17957	18013	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sfl-3-1	NZ_JOCU01000004.1	+	188839	188895	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-109-1	NZ_JOIC01000006.1	+	63381	63437	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sfl-2-1	NZ_JNVV01000004.1	+	188944	189000	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sla-3-1	NZ_JOB01000005.1	+	187241	187297	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-74-1	NZ_KI601353.1	-	672230	672174	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-162-1	NZ_KL585947.1	+	251029	251085	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-164-1	NZ_KL585169.1	-	174791	174735	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-161-1	NZ_JOCT01000004.1	-	557487	557431	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sgl-2-1	NZ_CP009438.1	+	4600285	4600341	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-143-1	NZ_JOAW01000083.1	+	21714	21772	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-36-1	NZ_KB892158.1	+	80443	80499	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-196-1	NZ_KK106988.1	+	235730	235786	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-200-1	NZ_JXWX01000073.1	-	12207	12151	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sli-2-1	NZ_GG657756.1	-	3314931	3314875	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sli-1-1	NZ_CM001889.1	+	5192600	5192656	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sli-2-2	NZ_CP009124.1	-	3347250	3347194	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sco-2-1	NC_003888.3	+	5143469	5143525	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Svi-9-1	NZ_JOCE01000019.1	-	83006	82950	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sco-1-1	NZ_AHGS01001102.1	+	34290	34346	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-128-1	NZ_JOGV01000002.1	+	114246	114302	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sol-2-1	NZ_JOFH01000023.1	-	178524	178468	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-72-1	NZ_APIV01000001.1	-	622171	622115	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-124-1	NZ_JOHJ01000006.1	+	93024	93080	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-147-1	NZ_JOGT01000009.1	-	100768	100712	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-126-1	NZ_JOGJ01000017.1	+	292846	292902	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sce-2-1	NZ_JOEV01000018.1	-	142923	142867	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Smo-1-1	NZ_AORZ01000051.1	-	35230	35174	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Svi-9-2	NZ_JODI01000022.1	+	100216	100272	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sso-1-1	NZ_AJJM01000095.1	-	4025	3969	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Soc-1-1	NZ_JOAX01000002.1	+	178274	178330	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sni-2-1	NZ_JOFQ01000004.1	-	303573	303517	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Svi-11-1	NZ_JOBH01000014.1	+	179111	179167	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sex-2-1	NZ_AZSS01000011.1	+	62972	63028	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-6-1	NZ_KB912947.1	-	14396	14340	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-101-1	NZ_JOFW01000029.1	-	52272	52216	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-49-1	NZ_GG753626.1	+	3590861	3590917	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sal-11-1	NZ_CP010519.1	+	5393200	5393256	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Shy-2-1	NC_017765.1	+	6630461	6630517	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Shy-3-1	NC_020895.1	+	6324153	6324209	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-46-1	NZ_AGNH01000472.1	-	11085	11029	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-187-1	NZ_JOCG01000011.1	+	26447	26503	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-156-1	NZ_JOIY01000026.1	+	57550	57606	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sgr-10-1	NZ_KL503830.1	+	4506022	4506078	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Aac-1-1	NZ_JNYX01000001.1	-	551094	551038	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-197-1	NZ_JMLN01000037.1	+	22969	23025	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-20-1	NZ_KB891532.1	+	21043	21099	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-123-1	NZ_JOHL01000062.1	-	14420	14364	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-141-1	NZ_JOHU01000049.1	-	16428	16372	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sga-1-1	NZ_AOHP01000041.1	-	49677	49621	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→

Ssp-81-1	NZ_LARV01000087.1	+	36996	37052	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-113-1	NZ_KL591910.1	+	68579	68635	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-57-1	NZ_AZUS01000002.1	+	290899	290955	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-149-1	NZ_JOIV01000008.1	+	53324	53380	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-178-1	NZ_JOJG01000009.1	-	357423	357367	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sah-1-1	NZ_JXYI02000085.1	+	175249	175305	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sal-8-1	NZ_CP007574.1	-	4322438	4322382	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sal-10-1	NZ_CP006871.1	-	4620900	4620844	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sal-1-1	NZ_AROY02000047.1	+	56170	56226	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sal-9-1	NZ_AXDB02000042.1	-	10629	10573	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Svi-10-1	NZ_JODM01000001.1	+	289559	289615	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sch-1-1	NZ_JH164842.1	-	142738	142680	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sia-1-1	NZ_JNXI01000009.1	-	19967	19909	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Saf-1-1	NZ_KE354180.1	-	5829	5771	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-89-1	NZ_BBNN01000017.1	+	134818	134874	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sva-1-1	NZ_JYJH01000002.1	+	426	482	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sfl-7-1	NZ_JNXD01000002.1	-	531073	531017	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-158-1	NZ_JOIZ01000007.1	+	222840	222896	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sro-5-1	NZ_JOFL01000019.1	-	115762	115706	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-116-1	NZ_JOHV01000022.1	-	72383	72327	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
env-22	JGI25153J46596_10079674	+	416	472	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sam-1-1	NZ_CP012382.1	+	4777985	4778041	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-51-1	NZ_AUKV01000055.1	+	421	477	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Slu-1-1	NZ_KN039947.1	-	2174179	2174123	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sna-2-1	NZ_JRKI01000063.1	+	196029	196085	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sna-1-1	NZ_KL570007.1	-	55047	54991	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-75-1	NZ_LDZX01000014.1	-	12861	12805	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
env-23	JGI12419J13241_1019540	-	599	543	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-182-1	NZ_JOJH01000005.1	-	21931	219875	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Scy-2-1	NZ_CP010849.1	+	4633351	4633407	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-184-1	NZ_JNXK01000001.1	+	184828	184884	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-184-2	NZ_JOCJ01000007.1	+	53530	53586	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Svi-4-1	NZ_AMLP01000111.1	-	27781	27725	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-163-1	NZ_JOJB01000037.1	+	425	481	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-177-1	NZ_KL579031.1	-	16656	16600	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sol-1-1	NZ_JJOH01000017.1	+	251041	251097	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Svi-3-1	NZ_GG657757.1	+	5367559	5367615	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Szi-1-1	NZ_AGBF01000029.1	-	28163	28107	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Svi-13-2	NZ_LFNT01000154.1	+	521	577	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Svi-13-3	NZ_LGUR01000037.1	+	521	577	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Svi-13-4	NZ_LGUQ01000054.1	-	6858	6802	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-120-1	NZ_JOIA01001474.1	+	156	212	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-131-1	NZ_JOGX01000044.1	+	26042	26098	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sca-4-1	NZ_LFXA01000017.1	+	733261	733317	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sba-1-1	NZ_KI547048.1	+	192269	192328	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-65-1	NZ_AUFD01000010.1	-	185036	184977	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sme-2-1	NZ_JODL01000029.1	-	20518	20462	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-12-3	NZ_JNZI01000001.1	-	441683	441627	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-12-4	NZ_JOGN01000053.1	-	20537	20481	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-15-1	NZ_KB898225.1	+	40192	40248	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-38-1	NZ_FR873697.1	-	1509259	1509203	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sal-5-1	NZ_JOII01000001.1	-	312744	312688	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→

Ssp-99-1	NZ_JOGQ01000003.1	+	125525	125581	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-77-1	NZ_LAYX01000002.1	-	159453	159397	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Swa-1-1	NZ_JHDU01000025.1	-	87726	87670	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-30-1	NZ_KB890704.1	-	981330	981274	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-134-1	NZ_JOHX01000007.1	-	127009	126953	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-62-1	NZ_JTCK01000085.1	+	32179	32235	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-21-1	NZ_CM002271.1	+	4349395	4349451	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-35-1	NZ_CM002273.1	+	4354309	4354365	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-80-1	NZ_KN549146.1	+	250775	250831	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-12-5	NZ_JOGU01000007.1	-	148467	148411	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sva-2-1	NZ_JOBFO1000008.1	-	20052	19996	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sva-2-2	NZ_JOFN01000040.1	-	18282	18226	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-58-1	NZ_AUKQ01000015.1	+	52320	52377	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sal-12-1	NZ_JOID01000003.1	+	68800	68856	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sfr-1-1	NZ_LGSP01000027.1	-	10382	10326	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sfr-1-2	NZ_JNAD01000026.1	-	10369	10313	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sxi-2-1	NZ_AFRP01001524.1	+	40341	40397	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-119-1	NZ_JOHR01000002.1	+	230095	230151	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-33-1	NZ_KB891885.1	-	239596	239541	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-37-1	NZ_BARG01000058.1	-	624	569	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-170-1	NZ_JODG01000026.1	+	329	385	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
						Ugd (COG1004)NDP-sugDHase (TIGR03026)→	
Smi-1-1	NZ_KN050740.1	-	288662	288606	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-138-1	NZ_JOIU01000016.1	+	88730	88786	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sga-2-1	NZ_JRHJ01000054.1	+	156382	156438	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
env-24	JGI24740J21852_10018017	-	980	924	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
env-25	JGI24739J22299_10011386	-	2321	2265	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
env-26	JGI24737J22298_10030274	-	711	655	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	hypo→
env-27	JGI24735J21928_10022680	+	1260	1316	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
env-28	JGI24738J21930_10016389	+	901	957	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
env-29	JGI24738J21930_10017841	-	666	610	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sca-1-1	NZ_KB911586.1	+	111863	111919	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-23-1	NZ_KE150428.1	+	48833	48889	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-135-1	NZ_JNXF01000033.1	-	14094	14038	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-137-1	NZ_JOHP01000033.1	-	14040	13984	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-91-1	NZ_JNZW01000034.1	-	14086	14030	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-136-1	NZ_JOHS01000031.1	-	14033	13977	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-169-1	NZ_JODC01000003.1	-	760731	760675	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
env-30	JGI24736J21556_1066001	+	409	465	RNA→		
Ssv-1-1	NZ_CM000951.1	+	5617327	5617383	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	hypo→
						PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→	hypo→
Ssp-186-1	NZ_JOBZ01000048.1	+	11344	11400	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sda-1-1	NC_020504.1	-	4173417	4173361	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-12-6	NZ_JOJE01000032.1	-	42148	42092	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-199-1	NZ_JXTE01000103.1	-	19424	19368	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
env-31	JGI25160J50197_1027159	-	1290	1235	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-88-1	NZ_BBNO01000005.1	+	169561	169616	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-19-1	NZ_AQWO01000012.1	-	42118	42063	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sfu-2-1	NZ_JOEY01000005.1	-	283078	283023	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
						Glyco_hydro_26 (pfam02156)→	
Sau-2-1	NZ_JH725387.1	+	3734051	3734106	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sxy-1-1	NZ_JNWO01000013.1	+	27275	27330	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-122-1	NZ_JNXE01000005.1	+	80283	80338	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	

Spr-2-1	NZ_BARF01000005.1	+	85303	85358	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Ssp-84-1	NZ_LBMU01000061.1	-	29957	29901	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Sip-1-1	NZ_AEJC01000092.1	+	9205	9260	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sly-2-1	NZ_CP007699.1	+	4988677	4988732	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssc-2-1	NZ_KB889574.1	-	55636	55581	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Sye-1-1	NZ_JQNR01000005.1	+	1956765	1956820	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Svi-6-1	NZ_KB904651.1	-	121812	121756	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Sni-1-1	NZ_CM002280.1	-	3417483	3417429	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssu-2-1	NZ_AJTQ01000307.1	+	13549	13604	RNA→ RplQ (COG0203) rplQ (PRK05591) →
Ssu-1-1	NZ_KB905817.1	-	189202	189147	RNA→ RplQ (COG0203) rplQ (PRK05591) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Svi-2-1	NC_015957.1	+	705115	705170	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sfl-4-1	NZ_AUBE01000006.1	-	238624	238569	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Spu-1-1	NZ_KB913030.1	+	4401513	4401568	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssc-4-2	NZ_JOBC01000019.1	-	77220	77165	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Shy-1-1	NZ_GG657754.1	-	4571299	4571244	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
env-32	JGI25160J50197_1040719	-	1000	945	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → truA (PRK00021) PseudoU_synth_1 (pfam01416) →
Sbi-1-1	NC_016582.1	+	7517266	7517321	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Afl-1-1	NZ_KB894099.1	-	208768	208711	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Ssp-55-1	NZ_JTIY01000001.1	-	1514095	1514041	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Ssp-152-1	NZ_JOCX01000005.1	+	52944	52998	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Ssp-104-1	NZ_JOIS01000020.1	-	101942	101888	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Ssp-166-1	NZ_JODE01000005.1	+	46633	46687	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-167-1	NZ_JODJ01000029.1	+	46652	46706	AAA (smart00382) Uup (COG0488) AAA_21 (pfam13304) → DUF2029 (pfam09594) → DUF2029 (pfam09594) → RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-191-1	NZ_JWZS01000804.1	+	24884	24938	AAA (smart00382) Uup (COG0488) AAA_21 (pfam13304) → DUF2029 (pfam09594) → DUF2029 (pfam09594) → RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sxa-1-1	NZ_JNZH01000037.1	-	123110	123056	AAA (smart00382) Uup (COG0488) AAA_21 (pfam13304) → hypo → RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sxa-1-2	NZ_JOFT01000047.1	+	32685	32739	AAA (smart00382) Uup (COG0488) → DUF2029 (pfam09594) → RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sla-1-1	NZ_JNXL01000004.1	+	16844	16898	AAA (smart00382) Uup (COG0488) → DUF2029 (pfam09594) → RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Svi-12-3	NZ_JNYC01000038.1	+	47873	47927	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sla-2-2	NZ_JOEW01000015.1	+	48662	48716	AAA (smart00382) Uup (COG0488) AAA_21 (pfam13304) → RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-150-1	NZ_JODA01000027.1	-	24120	24066	AAA (smart00382) Uup (COG0488) AAA_21 (pfam13304) → DUF2029 (pfam09594) → RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-32-1	NZ_DS570396.1	-	78156	78102	AAA (smart00382) Uup (COG0488) AAA_21 (pfam13304) → DUF2029 (pfam09594) → RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-32-2	NZ_CP011664.1	+	4787937	4787991	AAA (smart00382) Uup (COG0488) AAA_21 (pfam13304) → AAA (smart00382) Uup (COG0488) AAA_21 (pfam13304) → DUF2029 (pfam09594) → DUF2029 (pfam09594) → RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ska-1-1	NZ_JNZY01000017.1	+	138776	138830	AAA (smart00382) Uup (COG0488) AAA_21 (pfam13304) → DUF2029 (pfam09594) → RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Sro-6-1	NZ_LFML01000045.1	+	17342	17396	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Ssp-194-1	NZ_AUKR01000012.1	+	193841	193895	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
env-33	LWSO_NODE.580	+	2805	2860	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-181-1	NZ_JOCD01000044.1	-	26202	26147	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Ssp-7-1	NZ_KB892128.1	+	655	710	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Ssp-140-1	NZ_KL591014.1	+	86235	86290	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Svi-1-1	NZ_ASHX01000001.1	-	1241638	1241583	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
Sca-2-1	NC_016111.1	+	3889184	3889239	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →
Sca-2-2	NC_017586.1	+	3888995	3889050	RNA→ rplQ (PRK05591) Ribosomal_L17 (pfam01196) → PseudoU_synth_EcTruA (cd02570) truA (PRK00021) →

Sts-1-1	NZ_AJSZ01000399.1	-	24785	24730	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-25-1	NZ_KB891797.1	+	527129	527185	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ska-1-2	NZ_JZWW01000003.1	+	52624	52679	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
						AAA (smart00382)Uup (COG0488)AAA_21 (pfam13304)→	DUF2029 (pfam09594)→
Smo-2-1	NZ_JNYL01000032.1	-	28345	28290	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-70-1	NZ_KN708638.1	-	3669055	3669000	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sba-2-1	NZ_KL573554.1	+	64146	64201	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sme-1-1	NZ_JOJK01000001.1	-	178778	178723	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-11-1	NZ_JYBE01000004.1	-	64041	63986	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgl-1-1	NZ_JH689267.1	-	288602	288547	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-76-1	NZ_JPWW01000002.1	+	1014580	1014635	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-12-7	NZ_JOGA01000004.1	-	151218	151163	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgl-3-2	NZ_JNZK01000003.1	-	116076	116021	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-4-1	NC_010572.1	-	3318808	3318753	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
San-2-1	NZ_JNXS01000008.1	+	26146	26201	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
San-2-2	NZ_JOEZ01000006.1	-	175251	175196	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-3-1	NZ_GL877172.1	-	3511493	3511438	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
						PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-12-8	NZ_JOBR01000006.1	+	349597	349652	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-9-1	NZ_KB899005.1	+	126861	126916	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Seu-1-1	NZ_KQ257782.1	-	24925	24870	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-82-1	NZ_JXUQ01000001.1	+	4992228	4992283	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sal-12-2	NZ_JOED01000012.1	+	368027	368082	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-48-1	NZ_AGSW01000026.1	-	4221	4166	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
						PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sha-1-1	NZ_JOAZ01000028.1	-	8990	8935	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-8-1	NZ_JOFC01000040.1	-	9004	8949	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-45-1	NC_015953.1	+	4421046	4421101	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-18-1	NZ_ARPI01000009.1	+	69587	69642	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-71-1	NZ_AZVE01000001.1	-	707671	707616	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-175-1	NZ_KL585382.1	+	76745	76800	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-188-1	NZ_JJOB01000001.1	+	3882743	3882798	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-52-1	NZ_JTHL01000001.1	+	5725538	5725593	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sri-4-1	NZ_JOCQ01000089.1	-	23248	23193	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-145-1	NZ_JOHB01000009.1	+	199860	199915	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
env-34	JGI25160J50197_1029655	-	174	119	RNA→		
Sly-1-1	NZ_JNZA01000027.1	-	104738	104683	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-142-1	NZ_JOGE01000029.1	+	58699	58754	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-155-1	NZ_JOIX01000020.1	+	81701	81756	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-53-1	NZ_CP003987.1	+	5490097	5490152	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sat-2-1	NZ_JNXG01000002.1	+	464448	464503	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-95-1	NZ_JOAE01000005.1	-	277533	277478	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sfl-1-1	NC_016114.1	-	2965273	2965218	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-34-1	NC_021055.1	+	4462927	4462982	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
[pa-1-1	NZ_JNYQ01000004.1	-	851086	851031	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sol-2-2	NZ_JNWM01000003.1	+	440846	440901	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sfu-3-1	NZ_JNXH01000004.1	-	821119	821064	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sfl-8-1	NZ_JOAB01000003.1	-	795932	795877	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-154-1	NZ_JOIW01000004.1	-	790730	790675	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sce-1-1	NZ_JOEL01000031.1	+	46103	46158	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssc-5-1	NZ_JOEI01000008.1	+	148665	148720	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-144-1	NZ_KL589850.1	+	71321	71376	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-54-1	NZ_CBRG010000181.1	+	9589	9644	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→

Sgr-13-1	NZ_JOFF01000044.1	-	4277	4222	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sfl-9-1	NZ_JOAC01000001.1	+	308726	308781	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sro-4-1	NZ_ABYX02000001.1	+	4766062	4766117	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-22-1	NZ_AWOQ01000620.1	+	11739	11794	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Sro-2-1	NZ_DS999644.1	+	4713512	4713567	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sal-12-3	NZ_JNWW01000015.1	-	121666	121611	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-174-1	NZ_JOCW01000027.1	+	95259	95314	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-107-1	NZ_JOIP01000001.1	+	298835	298890	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-108-1	NZ_JOIO01000005.1	+	89666	89721	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-13-2	NZ_LGUZ01000023.1	-	4252	4197	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Spu-3-1	NZ_JOBG01000005.1	-	224288	224233	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-13-3	NZ_JOFE01000006.1	+	95269	95324	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-13-4	NZ_JOFD01000016.1	-	125262	125207	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Spu-3-2	NZ_JODK01000012.1	+	27097	27152	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sbr-1-1	NZ_JNXB01000005.1	+	80235	80290	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sca-5-1	NZ_KL573598.1	-	234310	234255	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sca-5-2	NZ_KL569913.1	+	82305	82360	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-13-5	NZ_JODO01000006.1	+	95248	95303	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-129-1	NZ_JOHA01000009.1	+	79533	79588	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-130-1	NZ_JOHD01000004.1	+	34514	34569	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-100-1	NZ_JOIH01000008.1	-	104878	104823	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Spu-2-1	NZ_JOFA01000009.1	+	27215	27270	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-12-9	NZ_JOIT01000002.1	+	49057	49112	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Spu-2-2	NZ_JOBQ01000009.1	+	27228	27283	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Svi-8-1	NZ_JNYP01000002.1	+	382717	382772	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	
Ssp-66-1	NZ_JNLT01000004.1	-	111420	111365	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-94-1	NZ_JOHG01000019.1	-	96015	95960	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-17-1	NZ_KB890938.1	+	398321	398376	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-193-1	NZ_ARPF01000004.1	-	200548	200493	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sat-1-1	NZ_JQJU01000001.1	+	70024	70079	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-44-1	NZ_KB891296.1	-	1243298	1243243	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Scy-1-1	NZ_JOEM01000001.1	-	651664	651609	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sfu-1-1	NC_021177.1	+	4972092	4972147	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sal-7-1	NZ_JNWF01000006.1	-	157973	157918	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-168-1	NZ_KL647092.1	-	163335	163280	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-97-1	NZ_JOJO01000001.1	+	71929	71984	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-146-1	NZ_JOGZ01000044.1	-	52593	52538	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sod-1-1	NZ_LATD01000297.1	+	18268	18323	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-2	NZ_JOBO01000012.1	+	88122	88177	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sgr-6-1	NZ_LGUW01000024.1	+	68205	68259	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-3	NZ_JOBV01000009.1	+	106610	106664	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-4	NZ_JOES01000007.1	+	106606	106660	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-5	NZ_JNWX01000006.1	+	69237	69291	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-2-1	NZ_JMGX01000035.1	+	49554	49609	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Kau-1-2	NZ_LGUY01000192.1	+	63444	63499	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-179-1	NZ_JOCC01000033.1	+	69292	69347	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-6	NZ_JOEO01000033.1	-	28104	28049	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-7	NZ_JJNYK01000036.1	-	28104	28049	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-8	NZ_JOBN01000012.1	+	209341	209396	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-9	NZ_JOCL01000017.1	+	107763	107818	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-10	NZ_JOCR01000028.1	+	69299	69354	RNA→	rplQ (PRK05591)Ribosomal.L17 (pfam01196)→	PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→

Sri-4-11	NZ_JOCO01000017.1	+	107815	107870	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-12	NZ_JOBS01000018.1	+	107803	107858	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-180-1	NZ_JOCH01000032.1	+	69299	69354	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sca-6-1	NZ_JNWP01000055.1	+	21186	21241	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sca-6-2	NZ_JOFM01000031.1	+	69322	69377	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-13	NZ_JOB01000154.1	-	8051	7996	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-14	NZ_JOCM01000018.1	+	107761	107816	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-15	NZ_JOCP01000018.1	-	28099	28044	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-16	NZ_JNYR01000006.1	+	209435	209490	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sla-2-3	NZ_JOEX01000032.1	+	107616	107671	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sla-2-4	NZ_JOCN01000020.1	+	107890	107945	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-1-1	NZ_ANSJ01000031.1	+	47278	47333	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-3-1	NZ_JJNO01000013.1	+	209385	209440	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-2-2	NZ_JMGY01000011.1	+	209215	209270	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-17	NZ_JOET01000019.1	+	107682	107737	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-90-1	NZ_JNWN01000026.1	-	28254	28199	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Spe-2-1	NZ_JOCK01000016.1	+	107552	107607	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sri-4-18	NZ_JOBW01000066.1	+	21254	21309	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-185-1	NZ_JOJI01000014.1	+	111307	111361	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-19	NZ_JOB01000017.1	-	140212	140157	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sri-4-20	NZ_JOJJ01000026.1	+	70453	70508	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-5-1	NZ_KB892002.1	-	454475	454420	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-29-1	NZ_KB891785.1	-	425407	425352	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-31-1	NZ_AQWQ01000002.1	-	425407	425352	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-26-1	NZ_KB891594.1	-	382830	382775	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-27-1	NZ_KB891406.1	-	1044742	1044687	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-79-1	NZ_KI911349.1	+	472182	472237	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-78-1	NZ_AZVF01000001.1	-	1050889	1050834	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Aat-1-1	NZ_KB907214.1	-	233058	233000	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-117-1	NZ_JOHY01000071.1	-	9294	9239	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-198-1	NZ_KL370770.1	+	196586	196640	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-115-1	NZ_JOHT01000007.1	+	90429	90475	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-148-1	NZ_JOGD01000029.1	+	57793	57839	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Psi-1-1	NZ_CP009896.1	-	4283040	4282985	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ IspH (COG0761)ispH (PRK01045)→
Ssp-4-1	NZ_ALAP01000018.1	-	152336	152283	PRK11630 (PRK11630)SUA5 (COG0009)→
Ssp-67-1	NZ_AUKN01000012.1	+	38678	38731	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-201-1	NZ_LAND01000020.1	+	47240	47292	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Aal-1-1	NZ_KB892746.1	+	281585	281636	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649)→
Sal-13-1	NZ_JOFJ01000024.1	-	50986	50914	hypo→ hypo→ RNA→ RplQ (COG0203)rplQ (PRK05591)→
Ari-1-1	NZ_AULB01000026.1	+	70386	70458	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-40-1	NZ_ADXA01000020.1	-	61314	61258	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-39-1	NZ_ADXB01001219.1	+	56	112	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssp-42-1	NZ_GG657742.1	-	2775010	2774954	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-47-1	NZ_CM001165.1	+	4663630	4663686	RNA→ ←hypo
Ssp-41-1	NZ_GG770539.1	+	4279054	4279112	RNA→ hypo→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→ hypo→
Ssp-125-1	NZ_JOGO01000002.1	-	47335	47279	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Nsp-3-1	NZ_JIAV01000015.1	-	114208	114159	RNA→ RplQ (COG0203)rplQ (PRK05591)rne (PRK10811)→

Nsp-2-1	NZ_KK211169.1	+	269460	269509	RNA→ RplQ (COG0203)rplQ (PRK05591)→
env-35	JGI12075J13256_1000799	-	577	527	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
env-36	JGI12112J13074_1005592	-	506	456	RNA→ RplQ (COG0203)rplQ (PRK05591)→
env-37	JGI12271J12027_1176655	+	141	191	RNA→
env-38	JGI12396J12026_1276148	+	100	150	RNA→ hypo→
env-39	JGI12397J12024_1184993	+	151	201	RNA→
env-40	JGI12271J12027_1236889	+	33	83	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Nlu-1-1	NZ_JZDQ01000118.1	+	6491	6537	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
env-41	JXWU01108663.1	+	303	347	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Nha-1-1	NZ_AUGT01000009.1	+	577134	577185	RNA→ RplQ (COG0203)rplQ (PRK05591)→
Sst-1-1	NZ_KQ257875.1	+	79579	79635	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sle-1-1	NZ_LN831790.1	-	3535110	3535054	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Sal-2-1	NC_020990.1	+	4279609	4279665	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ PseudoU_synth_EcTruA (cd02570)truA (PRK00021)→
Ssp-24-1	NZ_KE150476.1	-	126365	126312	RNA→ ←hypo
Ssp-132-1	NZ_JOHQ01000016.1	+	22026	22079	RNA→ ←hypo
Ssp-127-1	NZ_JOGK01000040.1	+	21913	21966	RNA→ ←hypo
Sgr-5-1	NZ_JNWT01000058.1	+	21899	21952	RNA→ ←hypo
Sal-12-4	NZ_JODZ01000010.1	+	169503	169556	RNA→ ←hypo
Sal-12-5	NZ_JODR01000016.1	+	224011	224064	RNA→ ←hypo
ScI-1-1	NZ_CM001015.1	+	4251346	4251401	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
ScI-1-2	NZ_CM000913.1	+	4257377	4257432	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssc-1-1	NC_013929.1	-	4144210	4144152	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Ssc-3-2	NZ_KL997514.1	+	21465	21523	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→
Sde-1-1	NZ_KL570245.1	+	195754	195809	RNA→ rplQ (PRK05591)Ribosomal.L17 (pfam01196)→

5.4 Conserved domains

Conserved domains found in protein-coding genes listed in Section 5.3 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one L17-Actino-Proteobacteria RNA are assigned a color, while others are shown in gray. The symbols ‘d’ and ‘u’ (if any) to the left of the colored domain name indicate whether the domain occurs upstream or downstream of the RNA motif. Domains marked with lower-case ‘d’ occur (at least once) present downstream

cd01167 (1) Fructokinases (FRKs) mainly from bacteria and plants are enzymes with high specificity for fructose, as are all FRKs, but they catalyzes the conversion of fructose to fructose-6-phosphate, which is an entry point into glycolysis via conversion into glucose-6-phosphate. [or ketohexokinases (KHKs)]

cd02440 (2) S-adenosylmethionine-dependent methyltransferases (SAM or AdoMet-MTase), class I; AdoMet-MTases are enzymes that use S-adenosyl-L-methionine (SAM or AdoMet) as a substrate for methyltransfer, creating the product S-adenosyl-L-homocysteine (AdoHcy).

cd02570 (329) Eukaryotic and bacterial pseudouridine synthases similar to E.

COG0009 (1) tRNA A37 threonylcarbamoyladenosine synthetase subunit TsaC/SUA5/YrdC [Translation, ribosomal structure and biogenesis]

COG0203 (37) Ribosomal protein L17 [Translation, ribosomal structure and biogenesis]

COG0488 (29) ATPase components of ABC transporters with duplicated ATPase domains

of some L17-Actino-Proteobacteria RNA in the opposite orientation. Domains marked with capital ‘D’ occur downstream and in the same orientation (i.e., a potential *cis*-regulatory arrangement). Domains marked with a ‘u’ occur upstream of the RNA in either orientation. If the ‘d’/‘u’ symbols are missing, then the domain is downstream and in the same strand. (This mode is used for motifs predicted as *cis*-regulatory.) The number in parentheses after the colored domain name is the number of occurrences in Section 5.3.

[General function prediction only]

COG0761 (1) 4-Hydroxy-3-methylbut-2-enyl diphosphate reductase IspH [Lipid transport and metabolism]

COG1004 (1) UDP-glucose 6-dehydrogenase [Cell wall/membrane/envelope biogenesis]

pfam01196 (524) Ribosomal protein L17.

pfam01416 (1) tRNA pseudouridine synthase.

pfam02156 (1) Glycosyl hydrolase family 26.

pfam09594 (19) Protein of unknown function (DUF2029).

pfam12848 (1) ABC transporter.

pfam13304 (21) AAA domain, putative AbiEii toxin, Type IV TA system.

pfam13620 (1) Carboxypeptidase regulatory-like domain.

pfam13649 (2) Methyltransferase domain.

PRK00021 (330) tRNA pseudouridine synthase A; Validated

env-5 UCUGAAGCACCCUGUCUCGCGCCGACACAGCCGAGGCGGCGAGGGGAGGGGGCCCGUAAAGCCCAACAAGGCAA
Sau-5-1 UGUCGUAACCCACGCCUCCGCGCCGACACCGGUUACACCGCGGGGAGUGAGGGGGCCCGUAAAAGGCCUCCUUGGCAA
Mfu-1-1 CCCCAGCGCCCGGACAUUGGCGGCAAGCGCGCGGAGGGAAAGGACCCCGUGAAGUCCUCCGGUUCGACGAGCAG
Mst-1-1 UUUCCUCCGUGCCCGGACAUUGUUGAGCGGCGCGGAGGGAAAGGACCCUUGUGAGACCCACCGGUUCAAUAGCAG
Msp-2-1 ACCUCCUCAACCGUCCGCGGCGACGCGGUCAGCGGCGGAGGGGAGGGGGCUGGAGCUUCCCGGCCGAUAGCAG
Mfu-2-1 GCCUCCCCAGCGGCGCGGGCAGCGGUCAGCGGCGGAGGGGAGGGGGCCGGAGCUUCCAGCCCGAUGACAG
env-6 CUGGGUCCACCGCGUGACACCGGUUACGCGCGCGGGCAGAGGGGGCCUCCUCAAUAACCGGAGGCCAAGGCAA
Cco-1-1 CACCUGCCUUGGCGGCCACCGACACCGGUUACGUGGCGGAGGCGAGGGGGCCCGUACACAGGGCCCGAUUCAA
env-7 GCCGAGGCAACGUCAGCAA
env-8 AGAACUGGCCCGCAGAACCCUGGACAAAGCCUAGAGCUCUGACAAUACGAAAGGCGGCCAACAGUCCCGUCCAGCGUG
Ama-1-1 GGACAAUACCGCGACGACGACGACGAGCUACGCCGAGACCGAGCAGUACUAGACCCGUAUCCCGCGCGGGGGCAC
env-9 CGGAGUGCGCAUAGAGUACCGAGCAGAAAGCGAGCGCGACCGGUCAGUGCAGAGUCCGAGCGGCGCGGUAUCCAGAC
env-10 GCGGACCGUCAGUCGAGUCCGAGCGGCGCGGUAUCCAGAC
1 Ssp-68-1 CUGCGGGCCCGGCGCGCCUCCGCGGCCACCGCGGAAAGCGCAUGGGAGCACAGCCCGCGCCCGUCCGGGGGCGCA
env-11 AGACCGAGCAGUACUGACCGGACCGCGGCGCGGGGCGCGUCCCGCGCGUCCGGGACAGCAGGCGCGCGGGCGU
env-12 GCAGUUGGCGCGUACAAUACAGUUGAUGGCGGCGCGGGCCGAAACUUCGUGUUCGGGUUCGCUCCGACAC
Ssp-96-1 CUACCGGAGACCGAGCAGUACUAAAGAUUCCGGACCGGGGCGGCCUUCGCGGCGCGCCCGCCACCGUGCAAGUCG
Ksp-1-1 GCGGAGACCGAGCAGUACUAGAGUUGGACCGGGGCGGCCUUCGCGGACCGCCCGCGUUCUAGCACAAGCCG
Kme-1-1 UUAACCGGAGACCGAGCAGUACUAGAUUUGGUCGGGACCGUCCACCGGAGCCCGGUAUGAAGGAAAGUCG
Rge-1-1 AGCGUUGAGAUCCGGGCGCGUCGCGGUCGUCGUAAGAACCGUCGCGGUCUCCGAGCGGAGCCCGGUGUCGAGU
Sca-3-1 UGAUCCAGCAGUACACCGUUCAGGUGUACGGGACCGUCUCCGCGGUCUCCGUAUCUUGAUGGCUUGAUGACAAAG
Sal-3-1 AGACCGAGCAGUACUGAAGAACCCUGGUCAGGACCGCCUCCGCGGUCUCCGUAUCUUGAAGGCGUGGACAAAGU
env-13 GACGACGACGACGCGGUCGUGGAGGACGAGCAGUACUAGUCCGCGGAGGCGCGCCUCCGGACACCCCGGA
1 Sav-3-1 GACGGUUCGCGGAGGACGAGCGGCGCGCGGUCGUGGAGACCGAGCAGUACUAGCCUCCGGGGUCCGCAAC
Ssp-195-1 AGACCGAGCAGUACUGAUCGACCGGCGGGGCGGCGACCGCGCGGCGGGCCCGCGCCCGUCCCGUCCGGCGAUCG
Nsp-4-1 ACCGCGGUGCGCGCGCGGCUACGACGACGACGACGCGGUCAGUCGAGACCGAGCAGUACUAGUUUCCCGUAAGC
env-14 GGAGAGGGGCCCGCGGGGUGAACGUA
Nco-1-1 CGCGGUGGCCCGCGGGCCUACGACGACGACGACGCGGUCAGUCGAGACCGAGCAGUACUACACACUGAUAGC
Sje-1-1 GACCGAGCAGUACUGAGCCGUAUCGAGUGGUAACGGGACCGCCCGCGGUCUCCGUAACCUUAGGUCGCAACCAAG
Kaz-1-1 GGACCGGGCGCGCCUCCGUGCGCCUUGUUCGAGUACACAGGGUCUGCGGGGACAAACCCCGAGACCCCAUAAAG
Kph-1-1 GGCUAACGCGGAGACCGAGCAGUACUGAGUUCGACACCGGGGGCGGUCUCCGCGGACCGCCCGGUGGCGUGAAG
Kph-1-2 GCUACGCGGAGACCGAGCAGUACUGAGUUCGACACCGGGGGCAGCCUUCGCGGGCGCGCCCGGUGGCGUGAAG
Sno-2-1 GGUUACGCGGAGACCGAGCAGUACUAAAGAUUUGGCGCGGGGGCGGUUCCAGCGGACCGCCCGGUCGACGGAAG
Ksp-3-1 GCACUUCGCGGAGACCGAGCAGUACUGAGAAUUGGCGCGGGGGCGGUUCCAGAAACCGCCCGCGUCCGUGAAG
Spy-1-1 GGUUACGCGGAGACCGAGCAGUACUAAAGAUUUGGCGCGGGGGCGGUUCCAGGAGCGCCCGCGUACGGAAG
Ksp-4-1 AGACCGAGCAGUACUGAUUCCUGAAGUCUAGCGCGGGGGCGGUUCCAGGUGAUCGCCCGGGGCAUGAAAAAG
Ssp-165-1 GGUUACGCGGAGACCGAGCAGUACUGAGAGACUAGACCGGGGGCGGUUCCCGGAAACCGCCCGGUCGUGGAAAG
Ssp-133-1 CGGGUUCGCGGAGACCGAGCAGUACUGAGAGACUAGACCGGGGGCGGUUCCCGGAAACCGCCCGGUCGUGAAG
Ssp-50-1 AGGGUUCGCGGAGACCGAGCAGUACUAAAGAUUUGGCGCGGGGGCGUCCAGCGGACCGCCCGGUAUCCGAAAG
Ssp-157-1 GGUUACGCGGAGACCGAGCAGUACUAAAGAUUUGGCGCGGGGGCGGUUCCCGGAAACCGCCCGGUCGUGAAG
Ssp-160-1 GCUACGCGGAGACCGAGCAGUACUGAGUUCGACACCGGGGGCGGUUCCCGGAGCGCCCGGUGGCGUGAAG
Ksp-2-1 GGUUACGCGGAGACCGAGCAGUACUGAGAGACUAGACCGGGGGCGGUUCCAGGAAACCGCCCGGUCGUGAAG
Ssp-183-1 CGGGUUCGCGGAGACCGAGCAGUACUGAGAGACUAGACCGGGGGCGGUUCCCGGAAACCGCCCGGUCGUGAAG
Sam-2-1 CCGAGCGGUGGCGCGGGCGGCUACGACGACGACGACGAGCGCCUACGUCGAGACCGAGCAGUACUAGUUUCAAUA
Sro-7-1 CCGAGCGGUGGCGCGGGCGGCUACGACGACGACGACGAGCGCGUACGUCGAGACCGAGCAGUACUAGUUUUCUGA
Ssp-87-1 CGGACCGCGUUCGUCGAGACCGAGCAGUACUAGAACUCCCGGUCGCGUGGUGGUGGUGGUCUACUCCGACCGCG
Ssp-190-1 CGGAGCGCGGUCUUCGUCGAGACCGAGCAGUACUAGAACCGCGGUCGCGUGGUGGUGGUGGUGGUCUACUCCGCG
Sir-1-1 CGGACCGCGUUCGUCGAGACCGAGCAGUACUAGAACUCCCGGUCGCGUGGUGGUGGUGGUGGUCUACUCCGCG
Shy-4-1 CGGACCGCGUUCGUCGAGACCGAGCAGUACUAGAACCGCGGUCGCGUGGUGGUGGUGGUGGUGGUCUACUCCGCG
Sro-3-1 CCCCAGCGGUGGCGCGGGCGGCGGCUACGACGACGACGACGCGGUCAGUCGAGACCGAGCAGUACUAGUUUUCUGU
Nin-1-1 GUUCGUCGAGCCCGGGCGGUAUGCAAGCGGCAUCGUUCCACCGCGUCGCGCGGCAACUGAAGAUCCGUGGCGGAG
1 Nca-1-1 ACAGAGCGGUAUCGUCGAGACCGAGCAGUACUAGAACCGCGGUCGCGUGGUGGUGGUGGUGGUGGUCUACUCCG
Ssp-192-1 UCGCGCCCGACCGGUAACUGAUACCGCGGUGGCGGUCGCGUCCGUGGGGAAAGCGGUGGUGGUGGUGGUGGUGG
Ssp-172-1 GAGCAGCGCGACCGCGGUGUUCGUGAGACCGAGCAGUACUAAAUUCUGCGGACCGCGUCGCGGCGGUCGCGAGUUC
Ssp-93-1 CGAGACCGAGCAGUACUAAAGAGCUCGGGACCGCGCGUAGUUUUGGUGGUGGUGGUGGUGGUGGUGGUGGUGG
Sau-3-1 CGAGACCGAGCAGUACUGAGAGCUCGGGCGCGGUCGUGGUGGUGGUGGUGGUGGUGGUGGUGGUGGUGGUGG
Sal-6-1 CGAGACCGAGCAGUACUAGAGCUCGGGACGCGGGAUAGUUUUGGUGGUGGUGGUGGUGGUGGUGGUGGUGGUGG
Sau-1-1 UCGAGACCGAGCAGUACUAGAGCUCGGGACGAGCGGUCGUGUUGGUGGUGGUGGUGGUGGUGGUGGUGGUGG
Ssp-106-1 AGGACGACGGGGACACGGGCUUCGCGGAGACCGAGCAGUACUGACGAAAGCGGUAUCGAGCGGCGCCCGCGGACAGU
Ssp-3-1 GAGCCUUCGCGGCGGAGGACGAGCGGGACACGGGCUUCGCGGAGACCGAGCAGUACUGAGCGUCCGUGGUCACAGU
env-15 GCGGCCUUCGCGACCGGUGACCGCCCGCGCGCGGGCGGACCGCGCGACCGGUGUCGUGGCAAGCCAUGAAGGU
env-16 GCGGCCUUCGCGACCGGUGACCGCCCGCGCGCGGGCGGACCGCGCGACCGGUGUCGUGGCAAGCCAUGAAGGU
env-18 AAGCCAUGAAGGU
Ssp-118-1 GCGCGCGGACCGCGGUGUCGCGGGGCUACGGGGCGGCGUGCUGAACCGCGCACCGCGUACCGCGCACACGAAAGC
env-19 CACCGGGCGCGGACUGUCGCGGGAUGAGGCGCCUCCGUAUCGCGGCGCACCGGCCCGUUCGCGGAGAUUGUAAGAG
env-20 CACCGGGCGCGGACUGUCGCGGGAUGAGGCGCCUCCGUAUCGCGGCGCACCGGCCCGUUCGCGGAGAUUGUAAGAG
env-21 ACCGGACCGCGGACUGUCGCGGGAUGAGGCGCCUCCGUAUCGCGGGAUGAGCGCGGACCGCGGAGAUUGUAAGAG
Sor-1-1 ACCGAGCAGUACUGAAGACAUUCGUCGCGGUCGCGGUCGCGCGCGGUGAUGCGGUAAGUUCGUAACGCGGUGCGCGGAC
Ssp-64-1 GUGGUGGUCUCCGCGGCGCACGGCCCGGGGCUCCGGGCGGAGAGCGCGGACAGAUUCCCGGUAACCGCGGGGGGUG
Ssp-12-1 GGGUGGUGGUCUCCGCGGCGCACGGCCCGGGGCUCCGGGCGGAGAGCGCGGACAGAUUCCCGGUAACCGCGGGGGGUG
Ssp-13-1 GGGUGGUGGUCUCCGCGGCGCACGGCCCGGGGCUCCGGGCGGAGCGCGGACAGAUUCCCGGUAACCGCGGGGGGUG
Ssp-61-1 CCGGACCUCCGCGCGGACACCUUCGCGCGGACGACGACGCGCGACGCGGGGCUUCGUGGAGACCGAGCAGUACUGAAGU
Ssp-59-1 CCCCACCUCCGCGCGGACACCUUCGCGCGGACGACGACGCGCGACGCGGGGCUUCGUGGAGACCGAGCAGUACUGAAGU
Ssp-16-1 CCCCACCUCCGCGCGGACACCUUCGCGCGGACGACGACGCGCGACGCGGGGCUUCGUGGAGACCGAGCAGUACUGAAGU
Ssp-69-1 CCCCACCUCCGCGCGGACACCUUCGCGCGGACGACGACGCGCGACGCGGGGCUUCGUGGAGACCGAGCAGUACUGAAGU
Ssp-56-1 GCGCGGACACCUUCGCGCGGAGGACGACGCGCGACGCGGGGCUUCGUGGAGACCGAGCAGUACUGAAGU
Hcr-1-1 CGUUCGCGGGGCGGCGGACGACGACGAGGACGCGGCGUUCGUGGAGACCGAGCAGUACUGAAGU
Msp-1-1 CGUACCGGAGUCGUGCGGAGGACACACCGUACACCGCGCGCCCGCGGUCGUAACCGGUGGGGGCGGAGUACAGCC
Mro-1-1 CUGAUCGCGGUCUCCGAGCAGCGGACACCGUUCGUGGCGCGGCGGUCGCGGAGUUCGCGGCGGUAAGGCGGCGAUGACAGUC
Ssp-171-1 CCGAGCGCGGUCUUCGUCGAGACCGAGCAGUACUGAUCCAGUUCGCGGGAGGCGCGGACUGCCGGGGCCCGCGUAC
Ssp-43-1 GAGCAGUACUAGUAGUUCGUGCGGGCGGCUUCGCGCGGUCGCGGAGUUCGCGGCGCCUUCGCGGCGGCGGUGUCU
Svi-13-1 GAGCAGUACUAGUAGUUCGUGCGGGCGGCUUCGCGCGGUCGCGGAGUUCGCGGCGCCUUCGCGGCGGCGGUGUCU
Ssp-73-1 CGUGGUCGUGGCGCGGAGUUCGCGGCGCCUUCGCGGCGGCGGUCUCCGAGGCGUUCGAAAGGAGAACCCGGAUCU
Ssc-3-1 GGUGCGGUGGCGGUGGUGGUCGCGGAGUUCGCGGCGGCGGUCUCCGAGGCGUCCUUCGCGGAGUUCGCGGAGUUC



env-1	C	GUGG	.....	AUCAAA	.....	CGUCUGA	..	CGAACCCUCCAGUACCGUAGGAG	..	GCAAAACAUGA	.....	AAGGAAAUACC	.....	AUCCGUCACGGACCGGACUAGUAAACU		
env-2	C	GUGG	.....	AUCAAA	.....	CGUCUGA	..	CGAACCCUCCAGUACCGUAGGAG	..	GCAAAACAUGA	.....	AAGGAAAUACC	.....	AUCCGUCACGGACCGGACUAGUAAACU		
[br-1-1	C	UGCGCCGGC	.....	CACCGA	.....	GCGCGGGUGAUG	..	CAA	CCCCGGUACCGUACGCGCGGG	..	UUAUAAGA	.....	AAGGAAAGACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU	
env-3	A	CAAGCCUCG	.....	GGUC	.....	GGAGCCUGAAG	..	CCUC	.....	GGUACCGUACCGGCA	.....	CGGGAUUAUAAAGGA	.....	AAGGAAAGACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Nal-1-1	C	UGCGCCUGG	.....	UCACC	.....	CGACCCUGAAC	..	CCUA	.....	CCGCGUACCGGUCACGGCCGAG	..	AGA	.....	GAGAGAAGCACG	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Nsp-1-1	A	GGACCGGGC	.....	AUUC	.....	GCGCGGUUC	..	CAC	.....	CUCCGGUACCGUACGCGCGGAC	..	CUA	.....	CGACCCGGUACCGUACGGCCGGG	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Mxa-1-1	A	GGCGCCU	.....	CGUCGC	.....	GGUCGCGCAUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	CUA	.....	CGACCCGGUACCGUACGGCCGGG	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-4	U	GGUGCCCGG	.....	UGC	.....	GGUCCUAUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Cfu-1-1	C	GGUGGAGCC	.....	GGUC	.....	GGUCCUAUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Avi-1-1	C	GGUGGAGCC	.....	CGUCGC	.....	GGUCCUAUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Age-1-1	C	GGUGGAGCC	.....	CGUCGC	.....	GGUCCUAUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Hmi-1-1	U	AGCGGACCUC	.....	GGUUC	.....	GAGUCCGUUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-5	U	GGCGAGCC	.....	CGUCGC	.....	GGUCCUAUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Sau-5-1	U	GGCGGCCCC	.....	UGUCG	.....	GGUCCUAUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Mfu-1-1	U	GGUGGGCC	.....	CGUCGC	.....	GGUCCUAUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Mst-1-1	U	GGCGGCCCC	.....	CGUCGC	.....	GGUCCUAUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Msp-2-1	U	GGCGGCCCC	.....	CGUCGC	.....	GGUCCUAUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Mfu-2-1	U	GGCGGCCCC	.....	CGUCGC	.....	GGUCCUAUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-6	U	AGCGACC	.....	CGUGUC	.....	GGUCCUAUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Cco-1-1	C	GGCGCCCGU	.....	GUGU	.....	GCGCGCGUUCUUC	..	CCAC	.....	CCGGUACCGUACGCGCGGAG	..	UUG	.....	GGCGCCUCCGAAAGGGCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-7	A	AGACCGCC	.....	UCAG	.....	GGGCGCGUGG	..	CACG	.....	CUCGGUACCGUACGCGCGGAG	..	UUA	.....	AGAAUAAG	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-8	A	GGCCUCG	.....	GAAG	.....	CGAGGUUGAUGG	..	CACC	.....	CCCGGUACCGUACGCGCGGAG	..	UUA	.....	AGAAUAAG	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ama-1-1	C	GUUCCCGG	.....	CGU	.....	CCU	.....	GGAAOCAG	.....	CUGA	.....	CGCGGUACCGUACGCGCGGAG	..	CAGG	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-9	C	GGGGUAC	.....	GAGUG	.....	GUGGCCCC	.....	CUGA	.....	CGCGGUACCGUACGCGCGGAG	..	CAGA	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-10	C	GGGGUAC	.....	GAGUG	.....	GUGGCCCC	.....	CUGA	.....	CGCGGUACCGUACGCGCGGAG	..	CAGA	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-68-1	C	CGCGGUCC	.....	UCUC	.....	GGGGCGGGGUC	..	CGUA	.....	CCCGGUACCGUACGCGCGGAG	..	A	.....	CGGUCGGGUCCGACAGCGGCGGAGGAAACAC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-11	C	UGGAC	.....	ACGGAAACAAGUGCA	.....	GUUACAACAGG	.....	CUGA	.....	CGCGGUACCGUACGCGCGGAG	..	CAGG	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-12	G	GGUCGGGGC	.....	GGCU	.....	GCCCGGGUCCA	.....	CUGA	.....	CGCGGUACCGUACGCGCGGAG	..	AGAAAU	.....	GAGAGACAGC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-96-1	U	ACGGGCA	.....	CAG	.....	CGCCGUGGCG	.....	CGG	.....	CUGCGGUACCGUACGCGCGGAG	..	CGGAGAUAC	.....	GAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ksp-1-1	U	CGGGGCA	.....	ACAG	.....	UGCCCGGCGC	.....	CGG	.....	CUGCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Kme-1-1	U	CGGGGCA	.....	ACAG	.....	UGCCCGGCGC	.....	CGG	.....	CUGCGGUACCGUACGCGCGGAG	..	CGGAGAUAC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Rge-1-1	A	GGGGC	.....	CCAGU	.....	GCCCGGUC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CAGAAUACA	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
SCa-3-1	C	GUAGGGCA	.....	ACAG	.....	UGCCCGGUGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Sal-3-1	C	GUAGGGCA	.....	ACAG	.....	UGCCCGGUGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-13	C	CGCGGUCC	.....	GGCU	.....	GCCCGGUGGCGCA	.....	CGUA	.....	CCCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Sav-3-1	C	CGCGGGG	.....	GUCU	.....	CGCCGGGCGCGCA	.....	CUGA	.....	CGCGGUACCGUACGCGCGGAG	..	CAGGAUA	.....	CAGGAGACAGC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-195-1	C	CGCGGGC	.....	GGACACCCUCCGGUACCGUAU	.....	GGCGCGAG	.....	CUCG	.....	CACCGGUACCGUACGCGCGGAG	..	CGGAGCAACG	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Nsp-4-1	C	CGGACC	.....	GUCCC	.....	GGUUCGGCGG	.....	CGGA	.....	CCCGGUACCGUACGCGCGGAG	..	CGGUGAACUCAC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-14	A	CGCGCGCGG	.....	CGA	.....	CGCGCGCGCGG	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGUGAACUCAC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Nco-1-1	C	CGCGCCCGCGG	.....	CGA	.....	CGCGCGCGCGG	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGUGAACUCAC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Sje-1-1	U	CGUCGGGCA	.....	ACAG	.....	UGCCCGUAGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Kaz-1-1	C	CGUCGGGCA	.....	ACCG	.....	UGCCCGUAGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Kph-1-1	U	CGUCGGGAC	.....	GGGU	.....	GUCCGACGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Kph-1-2	U	CGUCGGGAC	.....	GGGU	.....	GUCCGACGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Sno-2-1	U	CGUAGGGCA	.....	ACAG	.....	UGCCCGUAGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ksp-3-1	U	CGUAGGGCA	.....	ACAG	.....	UGCCCGUAGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Spy-1-1	U	CGUAGGGCA	.....	ACAG	.....	UGCCCGUAGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ksp-4-1	U	CGUAGGGCA	.....	CAG	.....	UGUCCGACGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-165-1	U	CGUAGGGCA	.....	CAG	.....	UGUCCGACGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-133-1	U	CGUAGGGCA	.....	CGG	.....	UGUCCGACGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-50-1	U	CGUAGGGCA	.....	CGG	.....	UGUCCGACGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-157-1	U	CGUAGGGCA	.....	CAG	.....	UGUCCGACGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-160-1	U	CGUAGGGCA	.....	CGAGU	.....	GUCCGUAGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ksp-2-1	U	CGUAGGGCA	.....	ACAGU	.....	GCCCGUAGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-183-1	U	CGUAGGGCA	.....	ACAGU	.....	GCCCGUAGC	.....	CGG	.....	CUCGGUACCGUACGCGCGGAG	..	CGGAGAUCC	.....	AAGGAGUUAUCC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Sam-2-1	A	CGGGGA	.....	UGG	.....	CGACUCCCGG	.....	CGGA	.....	CCCGGUACCGUACGCGCGGAG	..	CGGUGAACUC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Sro-7-1	A	CGGGGA	.....	UCC	.....	GAUCCCGG	.....	CUGA	.....	CCCGGUACCGUACGCGCGGAG	..	CGGUGAACUC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-87-1	C	ACAG	.....	CGUGGAU	.....	UUGUCA	.....	CUGA	.....	CACCGGUACCGUACGCGCGGAG	..	CAGACACC	.....	UAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-190-1	C	ACGG	.....	CGUGGAU	.....	UUGUCA	.....	CUGA	.....	CACCGGUACCGUACGCGCGGAG	..	CAGACACC	.....	UAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Sir-1-1	C	ACGG	.....	CGUGGAU	.....	UUGUCA	.....	CUGA	.....	CACCGGUACCGUACGCGCGGAG	..	CAGACACC	.....	UAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Shy-4-1	A	CGGGG	.....	CUGAU	.....	UCCGUA	.....	CUGA	.....	CACCGGUACCGUACGCGCGGAG	..	CAGACAUCC	.....	UAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Sro-3-1	A	ACGGGGA	.....	UCC	.....	GAUCCCGG	.....	CUGA	.....	CACCGGUACCGUACGCGCGGAG	..	CGGUGAACUC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Nin-1-1	C	CGUCGGAGG	.....	CCACCUCCUCCAAAUCGCU	.....	CCUCGACGCG	.....	UUA	.....	CCCGGUACCGUACGCGCGGAG	..	AGA	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Nca-1-1	A	CGCGCCUGG	.....	GACC	.....	GC	.....	CGUC	.....	CGCGGUACCGUACGCGCGGAG	..	CGGUGAACUC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-192-1	C	GUUCCGAGG	.....	GUG	.....	UCCUGGACGUUUG	.....	CUGA	.....	CACCGGUACCGUACGCGCGGAG	..	CAGACCG	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-172-1	C	CGCGGCC	.....	UGUC	.....	GGGCGGCGCA	.....	CUGA	.....	CCCGGUACCGUACGCGCGGAG	..	CAGACAUCC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-93-1	C	CGCGGCC	.....	UIAC	.....	GGGCGGCGGCGG	.....	CUGA	.....	CCCGGUACCGUACGCGCGGAG	..	CAGACAUCC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Sau-3-1	C	CGCGGCC	.....	UIAC	.....	GGGCGGCGGCGG	.....	CUGA	.....	CCCGGUACCGUACGCGCGGAG	..	CAGACAUCC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Sal-6-1	C	CGCGGCC	.....	UIAC	.....	GGGCGGCGGCGG	.....	CUGA	.....	CCCGGUACCGUACGCGCGGAG	..	CAGACAUCC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Sau-1-1	C	CGCGGCC	.....	UIAC	.....	GGGCGGCGGCGG	.....	CUGA	.....	CCCGGUACCGUACGCGCGGAG	..	CAGACACC	.....	UAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-106-1	C	CGCACUG	.....	CUGAC	.....	CAGUCCGCGC	.....	CUGA	.....	CACCGGUACCGUACGCGCGGAG	..	CAGACAGU	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-3-1	C	CGCACUG	.....	CUGAC	.....	CAGUCCGCGC	.....	CUGA	.....	CACCGGUACCGUACGCGCGGAG	..	CAGACAGU	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-15	A	CGGACCGGC	.....	GCAU	.....	GCGGUCGC	.....	CGGA	.....	CCCGGUACCGUACGCGCGGAG	..	CGGUGAACUC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-16	A	CGGACCGGC	.....	GCAU	.....	GCGGUCGC	.....	CGGA	.....	CCCGGUACCGUACGCGCGGAG	..	CGGUGAACUC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-18	A	CGGACCGGC	.....	GCAU	.....	GCGGUCGC	.....	CGGA	.....	CCCGGUACCGUACGCGCGGAG	..	CGGUGAACUC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
Ssp-118-1	A	UCGGCGGGC	.....	GACC	.....	GUCCCGCGGAC	.....	CUGA	.....	CACCGGUACCGUACGCGCGGAG	..	CAGACAUCC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-19	A	CGAGGGCGCGC	.....	CCCG	.....	GCGGCGGCGGCGG	.....	CGGA	.....	CCCGGUACCGUACGCGCGGAG	..	CGGUGAACUC	.....	AAGGAGAACCGCACC	.....	AUCCGUCACCGGUCACGGCCUUGCAAACU
env-20	A	CGAGGGCGCGC	.....	CCCG	.....	GCGGCGGCGGCGG	.....	CGGA	.....	CCCGGUACCGUACGCGCGGAG						

Ala-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina latercula</i> DSM 2041
Ama-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina macrocephali</i> JAMB N27
Ame-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina megaterium</i> XH134
Amu-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina muelleri</i> DSM 19832
Apa-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina pacifica</i>
Aal-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Arenibacter algicola</i>
Ace-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Arenibacter certesi</i> DSM 19833
Ala-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Arenibacter latericius</i> DSM 15913
Bar-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Bizionia argentinensis</i> JUB59
Cca-1-1 to Cca-1-3	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga canis</i>
Cgr-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga granulosa</i> ATCC 51502
Coc-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga ochracea</i>
Coc-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga ochracea</i> F0287
Coc-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga ochracea str.</i> Holt 25
Csp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga sp.</i> CM59
Csp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga sp. oral taxon</i> 324 str. F0483
Csp-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga sp. oral taxon</i> 326 str. F0382
Csp-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga sp. oral taxon</i> 329 str. F0087
Csp-6-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga sp. oral taxon</i> 332 str. F0381
Csp-7-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga sp. oral taxon</i> 335 str. F0486
Csp-8-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga sp. oral taxon</i> 336 str. F0502
Csp-9-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga sp. oral taxon</i> 380 str. F0488
Csp-10-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga sp. oral taxon</i> 412 str. F0487
Csp-11-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga sp. oral taxon</i> 863 str. F0517
Cal-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga algicola</i> DSM 14237
Cba-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga baltica</i> 13
Cba-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga baltica</i> 18
Cba-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga baltica</i> 4
Cba-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga baltica</i> NN016038
Csp-12-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga sp.</i> E6(2014)
Csp-13-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga sp.</i> Hel.L.12
Cca-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium caeni</i> DSM 17710
Cgr-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium gregarium</i> DSM 19109
Cha-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium halperniae</i>
Chi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium hispalense</i> DSM 25574
Cko-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium koreense</i> CCUG 49689
Cpa-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium palustre</i> DSM 21579
Csp-14-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium sp.</i> FH1
Csp-15-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium sp.</i> FH2
Csp-16-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium sp.</i> OV259
Csp-17-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium sp.</i> YR005
Csp-18-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium sp.</i> YR460
Cte-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium tenax</i> DSM 16811
Ddo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Dokdonia donghaensis</i> DSW-1
Dsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Dokdonia sp.</i> MED134
Dsp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Dokdonia sp.</i> PRO95
Ean-1-1 to Ean-1-4	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i>
Ean-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> Ag1
Ean-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> FMS-007
Ean-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUH1
Ean-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUH11
Ean-6-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUH4
Ean-7-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUH6
Ean-8-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUHP1
Ean-9-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUHP2
Ean-10-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUHP3
Ean-11-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> PW2809
Ean-12-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> R26
Eme-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia meningoseptica</i> 502
Eme-2-1 to Eme-2-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia meningoseptica</i> ATCC 13253 = NBRC 12535
Emi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia miricola</i>
Ead-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Eudoraea adriatica</i> DSM 19308
Fic-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flaviramulus ichthyenteri</i> Th78
Fba-6-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>bacterium</i> HQM9
Fba-7-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>bacterium</i> P7-3-5

Fba-8-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>bacterium</i> S85
Fan-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium antarcticum</i> DSM 19726
Faq-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium aquatile</i> LMG 4008 = ATCC 11947
Fbr-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium branchiophilum</i> FL-15
Fca-1-1 to Fca-1-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium cauense</i> R2A-7
Fch-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium chungangense</i> LMG 26729
Fco-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium columnare</i> ATCC 49512
Fda-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium daejeonense</i> DSM 17708
Fde-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium denitrificans</i> DSM 15936
Fen-1-1 to Fen-1-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium enshiense</i> DK69
Ffi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium filum</i> DSM 17961
Ffr-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium frigidarium</i> DSM 17623
Ffr-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium frigoris</i> PS1
Fge-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium gelidilacus</i> DSM 15343
Fgi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium gilvum</i>
Fhi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium hibernum</i>
Fin-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium indicum</i> GPTSA100-9
Fli-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium limnosediminis</i> JC2902
Fps-1-1 to Fps-1-10	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium psychrophilum</i>
Fps-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium psychrophilum</i> FPG101
Fps-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium psychrophilum</i> FPG3
Fps-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium psychrophilum</i> JIP02/86
Fre-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium reichenbachii</i>
Fsa-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium saliperosum</i> S13
Fsa-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium sasangense</i> DSM 21067
Fse-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium seoulense</i>
Fso-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium soli</i> DSM 19725
Fsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. 83
Fsp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. ABG
Fsp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. ACAM 123
Fsp-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. AED
Fsp-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. B17
Fsp-6-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. CF136
Fsp-7-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. F52
Fsp-8-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. F1
Fsp-9-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. KJJ
Fsp-10-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. MEB061
Fsp-11-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. URHB0058
Fsp-12-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. WG21
Fsu-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium succinicans</i> LMG 10402
Fsu-2-1 to Fsu-2-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium suncheonense</i> GH29-5 = DSM 17707
Fte-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium tegetincola</i> DSM 22377
Fag-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Formosa agariphila</i> KMM 3901
Fsp-13-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Formosa</i> sp. AK20
Gsa-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gaetbulibacter saemankumensis</i> DSM 17032
Gsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Galbibacter</i> sp. ck-12-15
Gme-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gelidibacter mesophilus</i> DSM 14095
Gli-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia limnaea</i> DSM 15749
Gsp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia</i> sp. CAL575
Gsp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia</i> sp. CBA3202
Gsp-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia</i> sp. Hel.I-29
Gsp-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia</i> sp. JM1
Gec-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gramella echinicola</i> DSM 19838
Gpo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gramella portivictoriae</i> DSM 23547
Iha-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Imtechella halotolerans</i> K1
Jpa-1-1 to Jpa-1-3	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Jejuia pallidilutea</i>
Jma-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Joostella marina</i> DSM 19592
Kje-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Kordia jejudonensis</i>
Kzh-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Kordia zhangzhouensis</i>
Ksp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Krokinobacter</i> sp. 4H-3-7-5
Lja-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Lacinutrix jangbogonensis</i>
Lsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Lacinutrix</i> sp. 5H-3-7-4
Lsp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Lacinutrix</i> sp. Hel.I-90
Lsp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Leeuwenhoekella</i> sp. Hel.I-48
Lsp-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Leeuwenhoekella</i> sp. MAR_2009_132

Myu-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Mangrovimonas yunxiaonensis</i>
Man-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Maribacter antarcticus</i> DSM 21422
Mfo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Maribacter forsetii</i> DSM 18668
Msp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Maribacter sp.</i> Hel.I.7
Mth-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Maribacter thermophilus</i>
Mze-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Mesoflavibacter zeaxanthinifaciens</i> DSM 18436
Mze-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Mesoflavibacter zeaxanthinifaciens</i> S86
Mmo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Mesonia mobilis</i> DSM 19841
Mlu-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Muricauda lutaonensis</i>
Msp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Muricauda sp.</i> MAR.2010.75
Min-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides injenensis</i> M09-0166
Ndo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Nonlabens dokdonensis</i> DSW-6
Nma-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Nonlabens marinus</i> S1-08
Nse-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Nonlabens sediminis</i>
Nul-1-1 to Nul-1-6	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Nonlabens ulvanivorans</i>
Oma-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Olleya marilimosa</i> CAM030
Osp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Olleya sp.</i> VCSA23
Osp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Olleya sp.</i> VCSM12
Orh-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Ornithobacterium rhinotracheale</i> DSM 15997
Orh-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Ornithobacterium rhinotracheale</i> H06-030791
Orh-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Ornithobacterium rhinotracheale</i> ORT-UMN 88
Psp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Polaribacter sp.</i> Hel1.33_49
Psp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Polaribacter sp.</i> Hel.I.88
Psp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Polaribacter sp.</i> MED152
Pgo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroflexus gondwanensis</i> ACAM 44
Pto-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroflexus torquis</i> ATCC 700755
Ptr-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroflexus tropicus</i> DSM 15496
Pbu-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroserpens burtonensis</i> DSM 12212
Pda-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroserpens damuponensis</i>
Pja-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroserpens jangbogonensis</i>
Pme-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroserpens mesophilus</i>
Psp-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroserpens sp.</i> Hel.I.66
Ran-1-1 to Ran-1-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i>
Ran-2-1 to Ran-2-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> ATCC 11845 = DSM 15868
Ran-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> CH3
Ran-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> RA-CH-1
Ran-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> RA-CH-2
Ran-6-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> RA-GD
Ran-7-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> RA-SG
Ran-8-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> RA-YM
Ran-9-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> Yb2
Rco-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella columbina</i> DSM 16469
Ssp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Salegentibacter sp.</i> Hel.I.6
Sxi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Salinimicrobium xinjiangense</i> DSM 19287
Ssp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Sediminibacter sp.</i> Hel.I.10
Sze-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Siansivirga zeaxanthinifaciens</i> CC-SAMT-1
Tna-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tamlana nanhaiensis</i>
Tse-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tamlana sedimentorum</i>
Tma-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tenacibaculum maritimum</i> NCIMB 2154
Tme-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tenacibaculum mesophilum</i>
Tov-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tenacibaculum ovolyticum</i> DSM 18103
Wma-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Weeksella massiliensis</i>
Wvi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Weeksella virosa</i> DSM 16922
Wps-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Winogradskyella psychrotolerans</i> RS-3
Wsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Winogradskyella sp.</i> PG-2
Zam-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Zhouia amylyolytica</i> AD3
Zga-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Zobellia galactanivorans</i>
Zul-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Zobellia uliginosa</i>
env-1 to env-2123	environmental samples					

6.2 Gene contexts

Each L19-Flavobacteria RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one L19-Flavobacteria RNA are assigned a color; other domains are gray. Information about these con-

served domains is given in Section 6.3. The accession of the sequence containing each L19-Flavobacteria RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each L19-Flavobacteria RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 6.1.

abbrev.	Seq. accession		5′ at	3′ at	genes
env-1	DelMOWin2010.c10054634	+	824	851	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-2	JCVL_SCAF_1101668113425	-	1241	1214	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-3	scaffold96896_1.MH0080	+	1611	1645	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-4	JCVL_SCAF_1101668324204	+	356	380	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ PRK08299 (PRK08299)→
env-5	CEVX01024844.1	+	3189	3216	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-6	JCVL_SCAF_1101668025146	+	75	102	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-7	scaffold46008_4.MH0055	+	3799	3835	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-8	2236876009_110915	-	51	24	RNA→
env-9	2236876011_102929	-	302	275	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-10	2236876009_236522	+	137	164	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-11	2236876010_0006057	-	121	94	RNA→ hypo→
env-12	SI47jul10_100m.c1059181	+	191	218	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-13	SI39nov09_120m.c1230431	-	223	196	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-14	SI36aug09_135m.c1030014	+	671	698	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-15	SI53jan11_100m.c1051597	+	314	341	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-16	SI60aug11_100m.c1037386	-	486	459	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-17	SI47jul10_120m.c1000746	+	8693	8720	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-18	SI53jan11_150m.c1118125	-	192	165	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-19	SI34jun09_120m_1000436	+	12936	12963	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-20	SI34jun09_135m_1001026	+	8736	8763	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-21	SI36aug09_100m_1040962	-	274	247	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-22	SI36aug09_120m_1000931	-	2702	2675	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-23	SI34jun09_100m_1000067	-	31230	31203	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-24	F10SI0310a_Sequence0000020675	+	300	327	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-25	F10SI03100a_Sequence0000002003	-	449	422	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-26	F10SI03120a_Sequence0000009017	-	632	605	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-27	JCVL_SCAF_1096627066532	-	2055	2028	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-28	CEWGO1100961.1	+	836	863	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-29	A09P0410a_Sequence0000049938	-	828	801	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-30	JCVL_SCAF_1096627807607	-	1865	1838	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-31	CENP01449906.1	+	6989	7016	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-32	CEOK01161594.1	-	675	648	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-33	CESO1045118.1	-	1107	1080	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-34	LPaug08P2610m.c1001156	+	4888	4915	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-35	CESF01045010.1	+	37	64	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-36	CESI01106464.1	-	2060	2033	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-37	CESU01171607.1	-	76	49	RNA→
env-38	DelMOSum2011.c10436309	-	43	16	RNA→ ←hypo
env-39	CEWOO1376889.1	-	537	510	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→

env-40	JGI20156J14371_10000063	-	46374	46347	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-41	CENG01060425.1	-	1443	1416	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-42	CEOM01373684.1	+	885	912	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-43	CENJ01127951.1	+	724	751	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-44	JCVL_SCAF_1096627276236	+	31293	31320	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-45	P_2C_Liq_1_UnCty_1015735	-	1527	1500	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-46	SRS022609_C3248272	-	149	114	RNA → rplS (PRK05338) →
env-47	NLM026_scaffold33221_1	-	492	457	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-48	SRS013476_C3069736	+	704	739	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-49	NOF004_scaffold34062_6	+	254	289	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-50	SRS020233_C4251492	-	197	162	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-51	JGI20154J14316_10000121	+	19996	20023	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → DUF1015 (pfam06245) → TIGR00044 (TIGR00044)PLPDE_III_YBL036c_like (cd00635) → ValS (COG0525)valS (PRK05729) →
env-52	JGI20153J14295_10000586	+	20619	20646	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → DUF1015 (pfam06245) → TIGR00044 (TIGR00044)PLPDE_III_YBL036c_like (cd00635) → ValS (COG0525)valS (PRK05729) →
env-53	JGI20153J14318_10000586	+	20619	20646	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → DUF1015 (pfam06245) → TIGR00044 (TIGR00044)PLPDE_III_YBL036c_like (cd00635) → ValS (COG0525)valS (PRK05729) →
env-54	JGI20154J14316_10009206	-	959	931	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → DUF1015 (pfam06245) →
env-55	DelMOSum2011_c10004732	-	2425	2397	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → DUF1015 (pfam06245) → SDR_c (cd05233)fabG (PRK05653) →
env-56	2236876010_0079494	-	132	104	RNA → hypo →
env-57	CEWG01003263.1	-	1195	1167	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → DUF1015 (pfam06245) →
env-58	2236876009_196101	-	440	412	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-59	JGI20154J14316_10002796	-	4419	4392	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → DUF1015 (pfam06245) → PRK07825 (PRK07825)adh_short (pfam00106) → TIGR00044 (TIGR00044)PLPDE_III_YBL036c_like (cd00635) →
env-60	CGULGFCP3IQ02J1ARS	+	207	234	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-61	2236876001_386712	+	198	225	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-62	2236876001_178730	+	31	58	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-63	SI34jun09_10m_1002607	-	5144	5117	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-64	JGI1221J11331_1002397	-	3466	3439	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-65	BS_KBB_SWE26_205m_c1114174	-	142	115	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-66	BS_KBA_SWE21_205m_10293102	+	80	107	RNA → ←hypo
env-67	CEQG01051930.1	+	175	202	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Nul-1-1	NZ_BBMK01000006.1	+	140006	140033	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fba-1-1	NZ_CH672374.1	+	838999	839026	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Nul-1-2	NZ_BBLG01000002.1	-	286727	286700	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Nul-1-3	NZ_BBMJ01000007.1	+	150921	150948	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Nul-1-4	NZ_BBNT01000005.1	-	74527	74500	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Nul-1-5	NZ_JPJI01000032.1	-	1150068	1150041	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Nul-1-6	NZ_BBMM01000005.1	+	148362	148389	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-68	TDF_OR_ARG04_113m_c1026478	+	123	150	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Csp-18-1	NZ_JUGG01000008.1	-	653525	653498	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Csp-15-1	NZ_LFNE01000002.1	-	475215	475188	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Csp-16-1	NZ_KN050755.1	-	362647	362620	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Chi-1-1	NZ_JARQ01000007.1	-	271126	271099	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-69	APMI01120637.1	-	2839	2812	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Cgr-2-1	NZ_AUMU01000006.1	-	52910	52883	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Csp-17-1	NZ_JUGK01000011.1	-	424788	424761	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fsp-5-1	NZ_BACY01000298.1	-	3551	3524	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-70	07_22_INULIN_DNA_scaffold76662_14	-	670	643	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-71	JGI20153J14295_10392805	+	60	87	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-72	JGI20153J14318_10392805	+	60	87	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-73	JCVL_SCAF_1096627352169	-	5043	5016	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-74	JCVL_SCAF_1096626620328	-	745	718	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-75	CEWG01401482.1	-	206	179	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-76	84538774	+	290	317	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-77	JCVL_READ_1106515117443	+	381	408	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-78	84539387	-	983	956	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-79	JCVL_READ_1101854579158	+	714	741	RNA →	
env-80	JCVL_READ_1101754002299	+	718	745	RNA →	
env-81	CESE01025856.1	+	5377	5404	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-82	CESI01208183.1	+	540	567	RNA →	
env-83	CESJ01033644.1	-	458	431	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-84	CEST01017140.1	+	5896	5923	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-85	CESU01147895.1	-	55	28	RNA →	
env-86	JCVL_SCAF_1096627480095	-	1803	1776	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-87	DelMOSum2010_c10678701	+	177	204	RNA →	
env-88	CAM_READ_0235983637	+	371	398	RNA →	
env-89	JCVL_SCAF_1101668031618	+	670	697	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-90	CERM01141528.1	+	522	549	RNA →	
env-91	JGI20157J14317_10131042	+	360	387	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-92	2236876002_127420	+	329	356	RNA →	
env-93	JCVL_SCAF_1096626613738	-	310	283	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-94	2236876006_283195	-	34	7	RNA →	
env-95	DelMOSum2010_c10002012	+	12245	12272	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-96	DelMOSum2011_c10031706	-	525	498	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-97	DelMOWin2010_c10001229	+	4276	4303	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-98	JGI20152J14361_10056501	-	442	415	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-99	JGI20156J14371_10026599	+	782	809	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-100	JGI20154J14316_10083694	+	359	386	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-101	JGI20160J14292_10012380	-	2489	2462	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-102	JGI20159J14440_10010596	+	2893	2920	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-103	JGI20155J14468_10002089	-	1100	1073	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-104	JGI20158J14315_10029275	+	515	542	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-105	A09P0410a_Sequence0000056231	+	784	811	RNA →	
env-106	F10SI0310a_Sequence0000007596	-	1376	1349	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-107	JCVL_SCAF_1096626854527	+	2612	2639	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-108	DelMOWin2010_c10025809	+	1404	1431	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-109	JGI20152J14361_10004558	+	2419	2446	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-110	JGI20151J14362_10005809	+	2820	2847	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-111	JGI20153J14295_10006540	-	5010	4983	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-112	JGI20153J14318_10006540	-	5010	4983	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-113	JGI20159J14440_10023770	-	1237	1210	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-114	JGI20155J14468_10003739	+	1801	1828	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-115	JGI20158J14315_10006321	+	2255	2282	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-116	CESS01145451.1	-	462	435	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-117	JGI20156J14371_10212006	+	469	496	RNA →	
env-118	JGI20154J14316_10004022	+	6496	6523	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-119	JGI20160J14292_10007636	+	2383	2410	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-120	P_2C_Liq_3_UnCty_100387	+	12092	12119	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-121	P_2C_Liq_1_UnCty_1000156	+	13091	13118	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-122	P_2C_Liq_2_UnCty_1000768	+	4871	4898	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-123	JGI20151J14362_10005693	+	5310	5337	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-124	JGI20153J14295_10091054	+	386	413	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-125	JGI20153J14318_10091054	+	386	413	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-126	JGI11876J14442.10491868	-	201	174	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-127	JGI11876J14442.10523508	+	238	265	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-128	CEOS01057510.1	+	637	664	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-129	CETR01239150.1	+	650	677	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-130	CETS01121663.1	-	506	479	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-131	CETZ01264369.1	+	15462	15489	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-132	CEUA01417981.1	-	740	713	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-133	CEVA01411844.1	-	180	153	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
Oho-1-1	NC_016599.1	-	405639	405612	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	hypo →
env-134	PR_CR_10.Liq_1.inCR_1003339	+	5067	5094	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	hypo →
env-135	PR_CR_10.Liq_3.inCR_1015616	+	986	1013	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-136	JCVL_SCAF_1101668700438	+	1308	1335	RNA →		
env-137	CETE01027368.1	+	993	1020	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-138	CEWH01269799.1	+	175	202	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-139	CEUH01076195.1	-	529	502	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-140	CEVG01157966.1	+	2615	2642	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-141	CEUU01157968.1	-	568	541	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-142	CEVA01228795.1	-	1304	1277	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-143	CEUW01090977.1	-	185	158	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-144	CENG01005083.1	+	2607	2634	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-145	CENU01397455.1	-	1003	976	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	PRK08299 (PRK08299) →
env-146	CENJ01029369.1	-	130	103	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
Nse-1-1	NZ_BBML01000004.1	-	136788	136761	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-147	CENG01172060.1	-	288	261	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-148	CENJ01036011.1	-	1206	1179	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	PRK08299 (PRK08299) →
env-149	CENJ01107579.1	-	484	457	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-150	JGI20151J14362.10016516	-	3534	3507	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	PRK08299 (PRK08299) →
env-151	JGI20156J14371.10021029	+	1321	1348	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	PRK08299 (PRK08299) →
env-152	JGI20160J14292.10169914	+	210	237	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-153	JGI20159J14440.10065380	+	387	414	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	PRK08299 (PRK08299) →
env-154	JGI20155J14468.10022096	-	399	372	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-155	JGI20158J14315.10073378	-	1006	979	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	PRK08299 (PRK08299) →
env-156	CEOS01040381.1	-	4293	4266	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-157	CEOX01212680.1	+	1004	1031	RNA →		
env-158	CEPD01030902.1	-	4264	4237	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-159	CERQ01076022.1	-	4315	4288	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-160	CESL01149743.1	-	4963	4936	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-161	CETA01027592.1	-	4529	4502	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-162	CETB01172258.1	+	5225	5252	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-163	CETG01164098.1	-	4952	4925	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-164	CETM01103031.1	-	1792	1765	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-165	CET001013763.1	+	6548	6575	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-166	CETR01123512.1	-	2833	2806	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-167	CETS01046135.1	+	8383	8410	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-168	CETT01303147.1	+	949	976	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-169	CETU01309689.1	-	765	738	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-170	CEUN01257627.1	+	429	456	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-171	CEUX01208011.1	-	370	343	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-172	CEUY01486419.1	-	3370	3343	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-173	CEVI01034447.1	-	284	257	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-174	CEVJ01148327.1	-	504	477	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	
env-175	CEVK01192335.1	+	325	352	RNA →	rplS (PRK05338)Ribosomal.L19 (pfam01245) →	

env-176	CEVM01083244.1	-	265	238	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-177	CEWI01140434.1	-	2409	2382	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Zpr-1-1	NC_014041.1	+	3889655	3889682	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-178	CEVA01498907.1	+	662	689	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-179	Buccal_mucosa_LANL_scaffold_37880	+	293	320	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-180	SRS018149_Baylor_scaffold_24394	+	14431	14458	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-181	SRS054569_C1505048	-	440	413	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-182	SRS024140_C1177031	-	285	258	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-183	SRS052668_LANL_scaffold_1943	-	64691	64664	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-184	SRS024347_C1548200	-	195	168	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-185	SRS017127_Baylor_scaffold_3172	-	838	811	RNA → PLN02820 (PLN02820)MmdA (COG4799) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-186	LGVO01048772.1	+	5860	5887	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-187	LGVF01504154.1	-	463	436	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-188	JCVL_SCAF_1096627098231	+	761	788	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → monomer_idh (TIGR00178)IDH (pfam03971) →
env-189	CESM01261374.1	-	289	262	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-190	CETE01135469.1	-	628	601	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → monomer_idh (TIGR00178)IDH (pfam03971) →
env-191	CETQ01070376.1	-	697	670	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → monomer_idh (TIGR00178)IDH (pfam03971) →
env-192	CEUH01016525.1	+	7232	7259	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → monomer_idh (TIGR00178)IDH (pfam03971) → PRK13484 (PRK13484)TonB_dep_Rec (pfam00593)Plug (pfam07715)CarbopepD_reg.2 (pfam13715)OMP_b-brl.3 (pfam13715)DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo →
env-193	CEWG01371477.1	-	849	822	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → monomer_idh (TIGR00178)IDH (pfam03971) →
env-194	TahiMoana_1003731	-	598	571	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-195	ElkS_mat_CD6A_1022331	+	121	148	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-196	JGI11876J14442_10027587	+	312	339	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-197	CEVK01107798.1	-	6100	6073	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-198	CEVM01261662.1	+	6748	6775	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-199	CEVO01248002.1	-	144	117	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-200	LPaug08P2610m.c1119498	+	167	194	RNA →
env-201	LPjun09P1210m.c1035922	+	137	164	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-202	G312J29652_10010132	+	1022	1049	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Rbi-1-1	NC_013222.1	+	2791912	2791939	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-203	JGI24024J18818_10269885	-	332	305	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-204	P_1C_Liq_3_UnCty_1004041	+	444	471	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-205	P_1C_Liq_1_UnCty_1002842	-	2900	2873	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-206	P_2C_Liq_1_UnCty_1206961	+	13	40	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-207	JGI20156J14371_10587087	-	192	165	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-208	ElkS_mat_MD6A_1140673	+	80	107	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-209	JGI11876J14442_10684723	-	250	223	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-210	LM29OCT2010E.c89422	+	70	97	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-211	JGI11876J14442_10078056	-	328	301	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Gsp-1-1	NZ_AMSG01000008.1	+	129752	129779	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-212	PR_CR_10_Liq_1_inCR_1041635	-	595	568	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-213	PR_CR_10_Liq_3_inCR_1112054	-	41	14	RNA →
env-214	ATED1026_F5B15RW02FGXY8	-	36	9	RNA →
env-215	JGI24023J19991_10000222	-	18096	18069	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-216	JGI24023J19991_10496689	-	276	249	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Man-1-1	NZ_JHZC01000004.1	-	677641	677614	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-217	NCBI_READ_1112493462061	+	858	885	RNA →
env-218	JGI24723J26617_10000035	-	19920	19893	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-219	UnmappedStool_Broad_C253267521	+	390	417	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-220	SRS016095_C2602647	+	2397	2424	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → hypo →
env-221	SRS019968_C2032833	+	279	306	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-222	4491417.3_NODE.24004	+	1215	1242	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-223	UnmappedStool_Broad_C252323657	+	165	192	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-224	SRS053917_LANL_scaffold_85389	+	54783	54810	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) →
env-225	SRS022725_LANL_scaffold_115907	-	16699	16672	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) →
env-226	SRS075410_LANL_scaffold_18149	-	1834	1807	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-227	SRS023841_C1664739	+	283	310	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)fabF (TIGR03150) → PRK10925 (PRK10925)SodA (COG0605) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) → SCO (cd02968) → DUF4325 (pfam14213) → PIN (pfam01850) → RsmA (COG0030)ksgA (PRK00274) →
env-228	Subgingival_plaque_LANL_C11225722	-	66	39	RNA →
env-229	SRS011126_Baylor_scaffold_19796	-	15490	15463	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)fabF (TIGR03150) → PRK10925 (PRK10925)SodA (COG0605) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) → SCO (cd02968) → DUF4325 (pfam14213) → PIN (pfam01850) → RsmA (COG0030)ksgA (PRK00274) →
env-230	SRS013949_C3491244	+	478	505	RNA →
env-231	SRS015899_WUGC_scaffold_40977	+	29485	29512	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)fabF (TIGR03150) → PRK10925 (PRK10925)SodA (COG0605) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) → SCO (cd02968) → DUF4325 (pfam14213) → PIN (pfam01850) → RsmA (COG0030)ksgA (PRK00274) →
env-232	SRS016297_C532705	-	142	115	RNA →
env-233	SRS022083_C1794273	+	126	153	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-234	SRS022536_LANL_scaffold_110861	-	15742	15715	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)fabF (TIGR03150) → PRK10925 (PRK10925)SodA (COG0605) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) → SCO (cd02968) → DUF4325 (pfam14213) → PIN (pfam01850) → RsmA (COG0030)ksgA (PRK00274) →
env-235	SRS023938_C2099915	+	111	138	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-236	SRS024381_C2283100	+	338	365	RNA →
env-237	SRS042984_LANL_scaffold_49763	-	3257	3230	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)fabF (TIGR03150) → PRK10925 (PRK10925)SodA (COG0605) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) → hypo →
env-238	SRS049318_LANL_scaffold_97896	+	617	644	RNA →
env-239	SRS065099_LANL_scaffold_36643	-	202	175	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-240	SRS065310_C1333489	+	502	529	RNA →
env-241	SRS075410_C3068469	+	2319	2346	RNA →
env-242	SRS015803_C2605009	+	372	399	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-243	SRS047634_LANL_scaffold_52163	+	1818	1845	RNA →
env-244	SRS017691_Baylor_scaffold_41406	+	1771	1798	RNA →
env-245	SRS055450_LANL_scaffold_77438	+	1416	1443	RNA →
Csp-2-1	NZ_ALNN01000014.1	-	9694	9667	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) → PRK10925 (PRK10925)SodA (COG0605) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) → SCO (cd02968) →
env-246	SRS050244_C4263116	-	66	39	RNA →
Cgr-1-1	NZ_KE150260.1	+	63374	63401	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) → SCO (cd02968) → DUF4325 (pfam14213) → PIN (pfam01850) → RsmA (COG0030)ksgA (PRK00274) →
env-247	SRS019980_C3055592	-	63	36	RNA →
env-248	SRS063603_LANL_scaffold_70638	-	72	45	RNA →
env-249	SRS011255_C2494079	-	69	42	RNA →
env-250	SRS014578_WUGC_scaffold_19186	+	5221	5248	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)fabF (TIGR03150) → PRK10925 (PRK10925)SodA (COG0605) →
env-251	SRS017445_Baylor_scaffold_33849	+	184	211	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-252	SRS017691_C5080407	-	78	51	RNA → hypo →
env-253	SRS018573_WUGC_scaffold_28515	+	3449	3476	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)fabF (TIGR03150) → PRK10925 (PRK10925)SodA (COG0605) →
env-254	SRS045197_WUGC_scaffold_27322	-	194	167	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-255	SRS063932_LANL_scaffold_8547	+	316	343	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-256	SRS022602_Baylor_scaffold_17361	-	665	638	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → hypo →

env-257	SRS013252_C3528677	+	307	334	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-258	SRS013705_C3926261	+	2029	2056	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-259	SRS015434_C5837920	+	260	287	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-260	SRS017139_Baylor_scaffold_77500	+	898	925	RNA → KAS.I.II (cd00834)fabF (TIGR03150) → hypo → PRK10925 (PRK10925)SodA (COG0605) →
env-261	SRS018157_Baylor_scaffold_33010	+	2985	3012	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-262	SRS018300_Baylor_scaffold_56055	+	6669	6696	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-263	SRS019028_WUGC_scaffold_24330	+	43055	43082	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-264	SRS019029_WUGC_scaffold_43710	+	5639	5666	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-265	SRS019071_C5218564	+	2113	2140	RNA →
env-266	SRS023926_C2716754	-	232	205	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-267	SRS024355_LANL_scaffold_16886	-	95	68	RNA →
env-268	SRS024649_LANL_scaffold_7780	-	430	403	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-269	SRS049318_LANL_scaffold_73392	+	507	534	RNA →
env-270	SRS051941_LANL_scaffold_75018	-	1329	1302	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-271	SRS052604_C1778119	+	204	231	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-272	SRS055378_LANL_scaffold_12682	+	3851	3878	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-273	SRS014477_C1574933	+	316	343	RNA →
env-274	SRS017304_C1915201	+	220	247	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-275	SRS045197_WUGC_scaffold_24835	+	1618	1645	RNA →
env-276	SRS047113_C5057443	-	72	45	RNA →
Csp-11-1	NZ_KE992168.1	+	41060	41087	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-277	SRS015762_C3669651	-	1738	1711	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) →
env-278	SRS015989_C2177835	-	199	172	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-279	SRS016746_Baylor_scaffold_79161	-	4503	4476	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-280	SRS043772_WUGC_scaffold_6381	+	547	574	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-281	SRS064449_LANL_scaffold_70561	+	3228	3255	RNA →
env-282	SRS011098_C1795866	+	278	305	RNA →
env-283	SRS012279_C2574426	+	101	128	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-284	SRS013723_Baylor_scaffold_90380	-	302	275	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-285	SRS013836_C4642922	+	91	118	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-286	SRS014578_WUGC_scaffold_47009	-	8623	8596	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-287	SRS014690_WUGC_scaffold_15252	+	1864	1891	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-288	SRS014888_C3106699	+	96	123	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-289	SRS015755_WUGC_scaffold_39561	+	2225	2252	RNA →
env-290	SRS015762_WUGC_scaffold_50704	+	8795	8822	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-291	SRS015797_WUGC_scaffold_33578	+	7661	7688	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-292	SRS016319_C3872782	+	96	123	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-293	SRS017511_Baylor_scaffold_29232	+	1941	1968	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-294	SRS018300_Baylor_scaffold_56130	+	96	123	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-295	SRS019028_WUGC_scaffold_30630	-	13299	13272	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-296	SRS019029_WUGC_scaffold_51290	-	216	189	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-297	SRS019122_C5922434	+	96	123	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-298	SRS019127_WUGC_scaffold_19698	-	2353	2326	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) →
env-299	SRS019906_WUGC_scaffold_11203	-	334	307	RNA →
env-300	SRS019980_Baylor_scaffold_24077	+	36052	36079	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-301	SRS021496_Baylor_scaffold_80652	-	8962	8935	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) →
env-302	SRS022077_C2503359	+	101	128	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-303	SRS022530_LANL_scaffold_60953	+	128871	128898	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) →
env-304	SRS023938_Baylor_scaffold_64946	+	867	894	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-305	SRS051378_LANL_scaffold_26894	-	581	554	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-306	SRS052876_LANL_scaffold_30038	+	1896	1923	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-307	SRS055378_LANL_scaffold_27817	-	196	169	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-308	SRS063288_LANL_scaffold_21438	-	2311	2284	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) →
env-309	SRS063999_LANL_scaffold_36605	+	103	130	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Cgi-1-1	NZ_ACLQ01000031.1	+	74550	74577	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) → PRK10925 (PRK10925)SodA (COG0605) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) →
env-310	SRS015158_WUGC_scaffold_7291	-	289	262	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-311	SRS065310_C1342652	-	237	210	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-312	SRS016200_WUGC_scaffold_37401	+	138	165	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-313	SRS013705_C3910892	-	51	24	RNA →
env-314	SRS017209_Baylor_scaffold_54331	-	82	55	RNA →
env-315	SRS018439_C2415034	+	2567	2594	RNA →
env-316	SRS018739_C3517180	-	170	143	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-317	SRS019077_WUGC_scaffold_45325	+	94	121	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-318	SRS023926_Baylor_scaffold_72969	+	206	233	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) → hypo →
env-319	SRS024441_C2947315	+	96	123	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-320	SRS050244_LANL_scaffold_54867	+	23174	23201	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-321	SRS050669_LANL_scaffold_708	+	7741	7768	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) →
env-322	SRS062544_C3036364	+	1599	1626	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) →
env-323	SRS023964_Baylor_scaffold_63915	-	289	262	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-324	SRS024355_LANL_scaffold_68198	-	289	262	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-325	SRS042131_WUGC_scaffold_62340	+	1868	1895	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-326	SRS075410_LANL_scaffold_45971	-	82	55	RNA →
env-327	SRS022602_Baylor_scaffold_115301	-	611	584	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → hypo →
env-328	SRS017445_Baylor_scaffold_77384	+	73	100	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-329	SRS058336_C2180371	-	2178	2151	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) →
env-330	SRS016002_C2622796	+	98	125	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) →
env-331	SRS018394_Baylor_scaffold_70182	+	834	861	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-332	SRS023841_Baylor_scaffold_23089	-	5503	5476	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → KAS_II (cd00834)Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925)SodA (COG0605) → tonB_Cterm (TIGR01352)TonB_C (pfam03544) →
env-333	SRS013252_C3501854	+	222	249	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-334	SRS013949_WUGC_scaffold_26347	-	289	262	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-335	SRS013950_C2064126	+	253	280	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-336	SRS015215_WUGC_scaffold_59667	-	1128	1101	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-337	SRS015278_C1853906	+	1366	1393	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-338	SRS015989_WUGC_scaffold_22267	+	1178	1205	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-339	SRS016331_WUGC_scaffold_4458	-	4432	4405	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-340	SRS016746_Baylor_scaffold_49712	+	3708	3735	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-341	SRS018157_Baylor_scaffold_36967	+	16031	16058	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-342	SRS018975_WUGC_scaffold_5756	+	23754	23781	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-343	SRS019071_WUGC_scaffold_32884	-	289	262	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-344	SRS020340_C2977594	-	289	262	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-345	SRS024021_Baylor_scaffold_35803	+	10911	10938	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-346	SRS024144_C1810569	+	1730	1757	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-347	SRS024561_LANL_scaffold_19935	+	3850	3877	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-348	SRS024649_C3635117	+	578	605	RNA →

env-349	SRS042984.LANL_scaffold_17949	-	524	497	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-350	SRS043755.C2384479	-	289	262	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-351	SRS043772.WUGC_scaffold_25088	+	1877	1904	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-352	SRS047265.WUGC_scaffold_21571	+	10737	10764	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834) Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925) SodA (COG0605) → tonB_Cterm (TIGR01352) TonB_C (pfam03544) →
env-353	SRS047634.LANL_scaffold_65807	-	82	55	RNA →
env-354	SRS051930.LANL_scaffold_29394	-	1258	1231	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-355	SRS075406.C837804	+	4602	4629	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-356	SRS016541.Baylor_scaffold_34066	+	23526	23553	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834) Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925) SodA (COG0605) → tonB_Cterm (TIGR01352) TonB_C (pfam03544) →
env-357	SRS053630.LANL_scaffold_23956	-	14901	14874	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834) Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925) SodA (COG0605) → tonB_Cterm (TIGR01352) TonB_C (pfam03544) →
env-358	SRS064329.C2710786	-	237	210	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-359	SRS011126.Baylor_scaffold_64408	+	519	546	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-360	SRS011343.Baylor_scaffold_21101	+	3877	3904	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-361	SRS012285.Baylor_scaffold_35900	-	433	406	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-362	SRS013533.C5373250	+	215	242	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-363	SRS015899.WUGC_scaffold_32404	+	5473	5500	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-364	SRS016043.WUGC_scaffold_15886	-	289	262	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-365	SRS017227.Baylor_scaffold_5549	+	3292	3319	RNA →
env-366	SRS018573.WUGC_scaffold_23933	+	4746	4773	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-367	SRS019333.C1276128	+	649	676	RNA →
env-368	SRS021477.Baylor_scaffold_72269	+	2598	2625	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-369	SRS023538.Baylor_scaffold_41620	+	7749	7776	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834) Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925) SodA (COG0605) → tonB_Cterm (TIGR01352) TonB_C (pfam03544) →
env-370	SRS024081.LANL_scaffold_74647	-	14542	14515	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834) Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925) SodA (COG0605) → tonB_Cterm (TIGR01352) TonB_C (pfam03544) →
env-371	SRS024138.Baylor_scaffold_45959	+	4204	4231	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834) Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925) SodA (COG0605) → tonB_Cterm (TIGR01352) TonB_C (pfam03544) →
env-372	SRS045197.WUGC_scaffold_31928	-	203	176	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-373	SRS047113.LANL_scaffold_42767	-	289	262	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-374	SRS049268.C4056582	-	82	55	RNA → hypo →
env-375	SRS049318.LANL_scaffold_162736	-	82	55	RNA →
env-376	SRS053584.LANL_scaffold_34108	+	3382	3409	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-377	SRS058053.LANL_scaffold_42593	+	127	154	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-378	SRS063215.LANL_scaffold_9737	-	206	179	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-379	SRS065099.LANL_scaffold_38497	+	1419	1446	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-380	SRS015044.WUGC_scaffold_40958	-	82	55	RNA →
env-381	SRS015470.WUGC_scaffold_48518	+	881	908	RNA →
env-382	SRS015947.C1406781	-	1120	1093	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-383	SRS052604.C1832355	-	290	263	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-384	SRS055401.LANL_scaffold_4017	+	3753	3780	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834) Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925) SodA (COG0605) → tonB_Cterm (TIGR01352) TonB_C (pfam03544) →
env-385	SRS016360.Baylor_scaffold_25143	+	778	805	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-386	SRS017025.C1733308	-	289	262	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-387	SRS019591.C1897347	-	576	549	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-388	SRS050628.LANL_scaffold_19974	+	122	149	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834) Ketoacyl-synt_2 (pfam13723) →
env-389	SRS058808.LANL_scaffold_17722	-	1470	1443	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-390	SRS019225.WUGC_scaffold_3159	-	14652	14625	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → KAS.I.II (cd00834) Ketoacyl-synt_2 (pfam13723) → PRK10925 (PRK10925) SodA (COG0605) → tonB_Cterm (TIGR01352) TonB_C (pfam03544) →
env-391	SRS014573.C3736643	-	387	360	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-392	SRS045715.C4787013	+	279	306	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-393	SRS015064.C1649023	-	315	288	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-394	SRS013170.Baylor_scaffold_118831	-	45	18	RNA →

env-395	SRS016575_Baylor_scaffold_24948	+	13	40	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-396	SRS011098_Baylor_scaffold_7568	+	1143	1170	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-397	SRS011255_Baylor_scaffold_19128	+	7753	7780	RNA →
env-398	SRS016092_C1080935	+	130	157	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-399	SRS063603_LANL_scaffold_85471	+	432	459	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-400	JGI24723J26617_10169939	+	159	186	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Aal-1-1	NZ_JPOO01000003.1	+	1020008	1020035	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-401	CENR01047393.1	+	64	91	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-402	JGI24723J26617_10002127	+	8185	8212	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-403	JGI24723J26617_10400028	-	167	140	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-404	JGI11876J14442_10842250	-	169	142	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-405	3300001197_1009609	+	200	227	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Cpa-1-1	NZ_KE383813.1	+	351899	351926	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-406	JGI20160J14292_10276556	+	252	281	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-407	JGI26524J50256_1027228	-	1038	1011	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-408	JGI26523J50269_1011208	-	1852	1825	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-409	JGI26527J51213_1021506	+	117	144	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-410	JGI26531J51214_10040747	-	1247	1220	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-411	SwRhRL2b_contig_430118	+	1429	1456	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Cte-1-1	NZ_AUAA01000036.1	+	28922	28949	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-412	APMI01002267.1	-	4164	4137	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-413	JGI26530J50255_1090020	+	26	53	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Cca-2-1	NZ_AUAFK01000009.1	+	927162	927189	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-414	2204596394	-	335	308	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-415	2158507912	-	335	308	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-416	3300001196_1012603	-	263	236	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-417	3300001197_1004711	-	1007	980	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-418	JGI26538J50259_1000010	+	108285	108312	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fba-3-1	NC_013062.1	-	907127	907100	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Cha-1-1	NZ_JPLY01000004.1	-	726335	726308	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-419	3300001592_10000850	+	8847	8874	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Cko-1-1	NZ_LFNG01000001.1	+	195794	195821	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Csp-14-1	NZ_JPLZ01000003.1	-	97674	97647	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-420	G312J29652_10118847	+	270	297	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-421	KVRMV2_101465984	+	447	474	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-422	JGI26530J50255_1091746	-	216	189	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-423	JGI26529J51215_1001451	+	7912	7939	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-424	CESG01229099.1	+	720	747	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-425	CEQS01103232.1	+	83	110	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-426	CEOF01031608.1	-	756	729	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-427	CENX01416069.1	+	1028	1055	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-428	CESI01090854.1	+	6360	6387	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-429	CESU01215068.1	-	134	107	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-430	CESI01241033.1	-	576	549	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Sze-1-1	NZ_CP007202.1	+	3148679	3148706	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-431	NCBI_READ_1112533034697	+	726	753	RNA →
env-432	CEVX01297991.1	-	487	460	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-433	CENF01074325.1	-	280	253	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-434	CEVU01029800.1	-	121	94	RNA → hypo →
env-435	CESM01056441.1	-	321	294	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-436	CEQN01349805.1	-	798	771	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-437	CEUA01051077.1	+	1051	1078	RNA → hypo →

env-438	CEOX01208336.1	-	960	933	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08299 (PRK08299) →
env-439	CEPK01106220.1	-	708	681	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08299 (PRK08299) →
env-440	CEQX01336274.1	-	961	934	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08299 (PRK08299) →
env-441	CEVS01105966.1	+	832	859	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08299 (PRK08299) →
env-442	CEOW01119178.1	-	642	615	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08299 (PRK08299) →
env-443	CEPW01076239.1	+	1420	1447	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08299 (PRK08299) →
env-444	CETU01284987.1	+	291	318	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-445	CEVL01112834.1	-	1317	1290	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08299 (PRK08299) →
env-446	CEVR01040825.1	-	1071	1044	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08299 (PRK08299) →
env-447	CEVW01007019.1	-	234	207	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-448	CEVY01168308.1	+	338	365	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-449	CEVZ01408390.1	-	747	720	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08299 (PRK08299) →
env-450	CEWO01314421.1	-	167	140	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-451	CEVG01047150.1	+	617	644	RNA →		
env-452	CEWH01127616.1	-	502	475	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-453	CETE01195508.1	-	433	406	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-454	CESB01079027.1	-	492	465	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-455	CEWH01141888.1	+	60	87	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-456	JCVL_SCAF_1096627080784	-	1550	1523	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-457	JCVL_SCAF_1096627154527	-	948	921	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-458	2236876001_368620	+	5	32	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-459	CEVE01148832.1	+	48	75	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-460	CEUF01225509.1	-	494	467	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-461	CEVH01093382.1	+	145	172	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-462	CENG01146222.1	+	169	196	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-463	CEOM01318431.1	-	353	326	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-464	CENO01076922.1	-	362	335	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-465	CEOC01161351.1	+	852	879	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-466	CEUQ01033343.1	-	386	359	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-467	CEUV01047175.1	+	3626	3653	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-468	CEVH01118179.1	+	204	231	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-469	JCVL_READ_1108799335411	-	468	441	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-470	JCVL_READ_1105333524717	-	686	659	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-471	JCVL_SCAF_1096627165370	-	2607	2580	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-472	CEOM01332252.1	+	48	75	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-473	CEUR01223384.1	+	46	19	RNA →		
env-474	CEWK01258637.1	-	133	106	RNA →	hypo →	
env-475	JCVL_SCAF_1096627377686	-	4544	4517	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	lcd (COG0538)PRK08299 (PRK08299) →
env-476	SI34jun09_10m_1057978	-	369	342	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-477	CENG01034942.1	-	1486	1459	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-478	CEOM01098376.1	-	235	208	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-479	CEVS01030948.1	+	1746	1773	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-480	CEWR01159377.1	+	50034	50061	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-481	CESF01020515.1	+	988	1015	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-482	CESO01050146.1	+	1060	1087	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-483	KVRMV2_100000088	-	5600	5573	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-484	KVRMV2_100034891	-	6394	6367	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-485	CERW01158022.1	+	442	469	RNA →		
env-486	LPaug08P2610m_c1078019	+	6	33	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-487	KGL_S1_ANT01_95m_c10010320	+	2206	2233	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-488	KGL_S2_ANT04_2345m_c1008589	-	3087	3060	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-489	KGL_S2_ANT05_2345m_c1137067	-	164	137	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	

env-490	KGL_S1_ANT03.95m.c1048383	+	153	180	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-491	KGL_S1_ANT02.95m.c10003481	-	1313	1286	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-492	KGL_S1_ANT02.95m.c10032222	+	261	288	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-493	KGL_S1_ANT01.95m.c10010675	+	3983	4010	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-494	KGL_S2_ANT05.2345m.c1144219	+	109	136	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-495	KGL_S1_ANT02.95m.c10086448	-	710	683	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-496	SI34jun09.10m.1080363	+	219	246	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-497	JGI20157J14317_10015639	+	4166	4193	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-498	CEPW01210536.1	+	127	154	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-499	CEUA01108642.1	+	6252	6279	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-500	CEWA01174457.1	+	746	773	RNA → ←hypo
env-501	JGI24023J19991_10003771	-	406	379	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-502	JCVI_READ_1104230194226	+	528	555	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-503	wf3_AHAI437_g1	+	799	826	RNA →
env-504	2236876001_449510	+	47	74	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-505	TDF_MC_ARG01_113m.c1099489	-	124	97	RNA → hypo →
env-506	JGI20153J14295_10005629	-	2919	2892	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) → PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo →
env-507	JGI20153J14318_10005629	-	2919	2892	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) → PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo →
env-508	CEPT01227262.1	-	57	30	RNA →
env-509	CESU01040866.1	-	1275	1248	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-510	JCVI_SCAF_1096627031829	-	1224	1197	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-511	CEVH01254860.1	-	217	190	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-512	JGI24023J19991_10003593	+	2712	2739	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-513	ASA120_GJFD58A02F7OV7	+	101	128	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-514	2236876001_074437	+	323	350	RNA →
env-515	KGL_S1_ANT01.95m.c10456706	-	66	39	RNA →
env-516	KGL_S1_ANT03.95m.c1008295	-	214	187	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-517	SA_S1_NOR08_45m.c10345472	-	298	271	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-518	KGL_S1_ANT03.95m.c1006880	+	307	334	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-519	JGI20154J14316_10012696	+	4846	4873	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-520	CEO001015956.1	+	214	241	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo →
env-521	CESR01281926.1	+	492	519	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-522	CEVG01003056.1	+	390	417	RNA → hypo →
env-523	JGI24025J20009_10088571	-	715	688	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-524	JCVI_READ_1108800202219	-	163	136	RNA →
Tma-1-1	NZ_BAUG01000055.1	+	4233	4260	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-525	2236876001_552703	-	123	96	RNA → hypo →
env-526	KGL_S1_ANT01.95m.c10209358	+	393	420	RNA →
env-527	P_2C_Liq_1_UnCty_1013314	+	1523	1550	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-528	P_2C_Liq_1_UnCty_1013450	-	874	847	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-529	JGI24024J18818_10000452	-	6510	6483	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-530	CERI01232405.1	-	69	42	RNA →
env-531	CEUB01095771.1	-	744	717	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-532	LGVF01272697.1	+	220	247	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-533	JCVI_READ_1103242157104	-	160	133	RNA →
env-534	JCVI_READ_1108800189128	+	253	280	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-535	2236876001_291567	-	86	59	RNA →
env-536	JGI20152J14361_10348201	-	184	157	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-537	2006938804	+	246	273	RNA → hypo →
env-538	JGI20156J14371_10009645	+	545	572	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-539	JGI20157J14317_10000094	+	89205	89232	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-540	DelMOSum2010_c10046964	+	738	765	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-541	JGI20152J14361_10050080	-	464	437	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-542	JGI20154J14316_10114600	+	178	205	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-543	JGI20160J14292_10167608	+	546	573	RNA →	
env-544	JGI20159J14440_10045553	-	1068	1041	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-545	JGI20155J14468_10052104	-	1080	1053	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-546	JGI20158J14315_10097952	-	470	443	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-547	F10SI0310a_Sequence0000013889	-	1032	1005	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-548	DelMOSum2011_c10479874	+	149	176	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-549	JGI20152J14361_10049778	-	470	443	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-550	JGI20153J14295_10000026	-	1056	1029	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-551	JGI20153J14318_10000026	-	1056	1029	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-552	JGI20159J14440_10045424	-	1068	1041	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-553	JGI20155J14468_10052697	-	1064	1037	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-554	JGI20158J14315_10000044	-	470	443	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-555	P_2C_Liq_1_UnCty_1031250	-	753	726	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-556	P_2C_Liq_2_UnCty_1144299	-	190	163	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-557	DelMOWin2010_c10191725	+	109	136	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-558	PML_READ_00935591	-	131	104	RNA →	← hypo
env-559	BS_KBA_SWE12_21m_c10032736	+	594	621	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-560	BS_KBA_SWE21_205m_10115428	-	372	345	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-561	BS_KBA_SWE02_21m_10146188	+	256	283	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-562	SA_S1_NOR08_45m_c10057602	-	805	778	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-563	SA_S2_NOR15_50m_c10029395	+	1634	1661	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-564	SA_S1_NOR02_45m_c1073127	-	170	143	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-565	SA_S2_NOR15_50m_c10237660	-	437	410	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-566	SA_S1_NOR05_45m_c10015507	+	313	340	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-567	SA_S1_NOR08_45m_c10002712	+	1145	1172	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-568	SA_S2_NOR15_50m_c10347322	-	312	285	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-569	SA_S1_NOR02_45m_c1174369	+	156	183	RNA →	hypo →
env-570	KGL_S1_ANT01_95m_c10003353	-	6873	6846	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-571	KGL_S1_ANT02_95m_c10361752	-	97	70	RNA →	
env-572	JGI1221J11331_1000054	-	29154	29127	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-573	ASLM20b_GM71RDO02HMAJ4	-	59	32	RNA →	hypo →
Fba-5-1	NC_014472.1	+	3298444	3298471	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-574	KGL_S1_ANT01_95m_c10282318	-	277	250	RNA →	hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-575	SA_S1_NOR05_45m_c10063021	+	354	381	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-576	SA_S1_NOR02_45m_c1006420	+	323	350	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-577	KGL_S1_ANT02_95m_c10152699	+	34	61	RNA →	hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-578	CESI01056244.1	+	1354	1381	RNA →	
Tme-1-1	NZ_LDOD01000007.1	-	131191	131164	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Zul-1-1	NZ_JQMD01000002.1	-	686490	686463	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-579	KGL_S1_ANT01_95m_c10220709	-	418	391	RNA →	hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-580	SA_S2_NOR13_50m_c1009519	+	390	417	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-581	SA_S1_NOR05_45m_c10030739	+	81	108	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-582	SA_S1_NOR08_45m_c10078726	-	177	150	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-583	SA_S2_NOR15_50m_c10004324	+	2414	2441	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-584	SA_S2_NOR18_50m_1017234	+	451	478	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-585	SA_S1_NOR08_45m_c10100170	+	733	760	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-586	SA_S2_NOR15_50m_c10049348	+	877	904	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-587	TDF_MC_ARG02_113m_c1036547	+	146	173	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-588	KGL_S1_ANT01_95m.c10011644	-	2952	2925	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-589	KGL_S1_ANT03_95m.c1001414	+	244	271	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-590	BS_KBA_SWE21_205m.10096012	-	541	514	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-591	LGVF01642023.1	+	527	554	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-592	DelMOSum2010_c10000064	+	13406	13433	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-593	DelMOSum2011_c10042862	+	72	99	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-594	SI34jun09_10m.1001399	+	1917	1944	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-595	JGI20152J14361_10000209	+	40144	40171	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-596	JGI20151J14362_10000555	-	1411	1384	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-597	JGI20156J14371_10000042	+	40239	40266	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-598	JGI20154J14316_10000040	+	40642	40669	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-599	JGI20160J14292_10000074	+	5141	5168	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-600	JGI20153J14295_10000199	+	26032	26059	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-601	JGI20153J14318_10000199	+	26032	26059	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-602	JGI20157J14317_10000069	-	62313	62286	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-603	JGI20159J14440_10000007	+	39982	40009	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-604	JGI20155J14468_10000017	-	82695	82668	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-605	JGI20158J14315_10000602	-	6255	6228	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-606	F10SI0310a_Sequence0000031405	+	45	72	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Zga-1-1	NC_015844.1	+	11699	11726	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-607	TDF_OR_ARG04_113m.c1009311	+	312	339	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-608	KGI_S2_ANT04_2345m.c1075036	-	569	542	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-609	KGI_S1_ANT02_95m.c10135656	-	480	453	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-610	KGI_S1_ANT02_95m.c10219286	-	147	120	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-611	JGI24023J19991_10008759	+	3422	3449	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Tov-1-1	NZ_KE387163.1	+	593630	593657	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-612	KGI_S1_ANT01_95m.c10030583	+	914	941	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-613	KGI_S1_ANT02_95m.c10406104	+	132	159	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-614	KGI_S1_ANT02_95m.c10445002	+	31	58	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ace-1-1	NZ_KE386915.1	-	8797	8770	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-615	DelMOSum2011_c10154912	+	8	35	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-616	CERS01121503.1	+	479	506	RNA →
env-617	JGI20152J14361_10000298	-	36606	36579	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → COX15-CtaA (pfam02628) → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-618	JGI20154J14316_10019853	-	413	386	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-619	JGI20160J14292_10056708	+	610	637	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-620	JGI20153J14295_10004656	+	5844	5871	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → COX15-CtaA (pfam02628) →
env-621	JGI20153J14318_10004656	+	5844	5871	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → COX15-CtaA (pfam02628) →
env-622	JGI20157J14317_10171026	-	182	155	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-623	JGI20153J14295_10241690	+	224	251	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-624	JGI20153J14318_10241690	+	224	251	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-625	JGI20156J14371_10014241	-	1035	1008	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-626	NCBI_READ_1112614356934	+	470	497	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-627	JGI20152J14361_10011154	-	64	37	RNA →
env-628	JGI20152J14361_10002150	+	8757	8784	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-629	CESU01163506.1	-	117	90	RNA → hypo →
env-630	JGI20154J14316_10029844	+	675	702	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-631	DelMOSum2011_c10007301	-	1729	1702	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-632	JGI20156J14371_10057408	+	984	1011	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-633	JGI20153J14295_10093405	-	123	96	RNA →

env-634	JGI20153J14318_10093405	-	123	96	RNA→	
env-635	JGI20157J14317_10007733	+	5168	5195	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-636	2236876009_261411	-	77	50	RNA→	hypo→
env-637	DelMOSum2010_c10004838	-	7637	7610	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-638	JGI20152J14361_10046914	+	1115	1142	RNA→	
env-639	2236876010_0651014	+	319	346	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fsp-12-1	NZ_AMYW01000004.1	+	95479	95506	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-640	JGI20152J14361_10056262	+	870	897	RNA→	
env-641	CESE01016993.1	-	115	88	RNA→	
env-642	CESI01086171.1	+	110	137	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-643	CESJ01062511.1	-	5384	5357	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-644	CESU01102979.1	-	419	392	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-645	JGI20152J14361_10002317	+	11082	11109	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-646	JGI20153J14295_10001978	+	15013	15040	RNA→	
env-647	JGI20153J14295_10015022	+	1046	1073	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-648	JGI20153J14318_10001978	+	15013	15040	RNA→	
env-649	JGI20153J14318_10015022	+	1046	1073	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-650	CERM01075739.1	+	5107	5134	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-651	sludgePhrap_Contig8207	-	493	466	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-652	2156199154	-	535	508	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-653	2210285019	+	294	321	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-654	JGI20160J14292_10046497	+	690	717	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-655	CESE01253289.1	-	285	258	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-656	CESJ01016245.1	+	3196	3223	RNA→	Ribosomal_L19 (pfam01245)→
env-657	JGI20152J14361_10000482	+	17691	17718	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-658	JGI20154J14316_10002680	+	12374	12401	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-659	JGI20160J14292_10003989	-	962	935	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-660	JGI20153J14295_10000826	-	7449	7422	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-661	JGI20153J14318_10000826	-	7449	7422	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-662	A09P04_1300_Sequence0000003336	-	2306	2279	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-663	NCBI_BBAY_READ_1106073089325	-	898	871	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ PRK08299 (PRK08299)→
env-664	P_1C_Liq_3_UnCty_1009162	-	198	171	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-665	P_1C_Liq_1_UnCty_1001883	-	3248	3221	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-666	P_1C_Liq_2_UnCty_1016458	+	549	576	RNA→	
env-667	NCBI_BBAY_READ_1106105074739	+	204	231	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ PRK08299 (PRK08299)→
env-668	CENJ01092743.1	-	137	110	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-669	NCBI_BBAY_READ_1106073037205	+	277	304	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ PRK08299 (PRK08299)→
env-670	CERS01174496.1	-	38	11	RNA→	
env-671	CEVW01141574.1	+	1150	1177	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-672	CEUA01411516.1	+	349	376	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-673	CEQM01197603.1	+	392	419	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-674	CEQN01023522.1	+	8459	8486	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-675	CEQO01070212.1	+	1934	1961	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-676	CEVS01116577.1	-	1094	1067	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-677	CEVP01261667.1	+	2	29	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-678	JCVI_READ_1104230344964	-	901	874	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-679	CERW01179445.1	+	13	40	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-680	DelMOWin2010_c10013017	+	4133	4160	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ PRK08299 (PRK08299)→
env-681	JGI20157J14317_10033833	+	996	1023	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ lcd (COG0538)PRK08299 (PRK08299)→
env-682	CEWH01233956.1	-	272	245	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-683	JCVI_SCAF_1101668058877	-	1488	1461	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ PRK08299 (PRK08299)→
env-684	CENT01032076.1	-	7307	7280	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→

env-685	CENG01052807.1	+	215	242	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-686	CESE01258788.1	+	699	726	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-687	CESJ01025343.1	+	3507	3534	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
Ean-11-1	NZ_CBYE01000026.1	-	462809	462782	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK10546 (PRK10546)Nudix_Hydrolase_31 (cd04690) →
Eme-1-1	NZ_AVCQ01000015.1	+	91308	91335	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-1-1	NZ_JNCG01000035.1	+	11502	11529	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-1-2	NZ_LFKT01000011.1	-	207966	207939	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-2-1	NZ_AHHG01000005.1	-	82828	82801	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ean-8-1	NZ_CP007547.1	+	2704094	2704121	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-3-1	NZ_CP006576.1	+	2075235	2075262	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-6-1	NZ_ASYI01000012.1	-	167353	167326	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-5-1	NZ_ASYK01000009.1	+	92547	92574	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-7-1	NZ_ASYJ01000045.1	-	40079	40052	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-10-1	NZ_ASYG01000013.1	-	186964	186937	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-9-1	NZ_ASYF01000003.1	+	87715	87742	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-4-1	NZ_ASYH01000003.1	+	87833	87860	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-1-3	NZ_CCAC010000045.1	+	65940	65967	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-1-4	NZ_CCAB010000079.1	+	65942	65969	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Ean-12-1	NZ_ANIW01000063.1	-	189045	189018	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	PRK08999 (PRK08999)Nudix_Hydrolase_31 (cd04690) →
Eme-2-1	NZ_BARD01000013.1	-	28567	28540	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
Eme-2-2	NZ_ASAN01000023.1	-	28545	28518	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-688	LPaug09P1610m.c1098533	+	95	122	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-689	JGI20157J14317_10000212	-	34865	34838	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	lcd (COG0538)PRK08299 (PRK08299) →
env-690	LPaug08P2610m.c1056069	+	194	221	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-691	CESU01106244.1	-	3668	3641	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	lcd (COG0538)PRK08299 (PRK08299) →
env-692	wf3_Contig2666	+	306	333	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-693	JGI11876J14442_10791786	-	254	227	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-694	DelMOSum2011.c10050897	-	758	731	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-695	JGI20153J14295_10078886	+	823	850	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-696	JGI20153J14318_10078886	+	823	850	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-697	JGI20153J14295_10079231	-	179	152	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-698	JGI20153J14318_10079231	-	179	152	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-699	SRS043422_C2637862	-	319	292	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-700	SRS013506_C1070803	-	155	128	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-701	SRS058105_C1803295	+	211	238	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-702	CEQS01154894.1	-	496	469	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-703	CETA01127273.1	+	1082	1109	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-704	2236876010_0239681	+	214	241	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-705	2236876010_0451387	+	219	246	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-706	JGI20154J14316_10000655	+	31048	31075	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-707	JGI20157J14317_10157594	+	564	591	RNA →		
env-708	CESI01155210.1	-	333	306	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-709	CESU01106790.1	-	246	219	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
Gfo-1-1	NC_008571.1	-	690781	690754	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-710	DelMOSum2010.c10261886	-	392	365	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-711	JGI20154J14316_10114945	-	324	297	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-712	JGI24025J20009_10008959	-	4721	4694	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-713	JGI20154J14316_10088205	+	421	448	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-714	JGI20156J14371_10005271	-	8543	8516	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-715	CETR01024806.1	+	447	474	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	
env-716	CXWF01011805.1	-	863	836	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →	hypo →

Cat-1-1	NC_014230.1	-	1512168	1512141	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-717	KGL_S1_ANT02.95m.c10343606	+	218	245	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-718	CEWR01292008.1	-	1347	1320	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-719	JGI24723J26617.10003020	+	3244	3271	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-720	SA_S1_NOR05.45m.c10349549	+	1	28	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-721	SA_S2_NOR15.50m.c10137904	+	11	38	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-722	SA_S1_NOR08.45m.c10597501	-	252	225	RNA→	hypo→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-723	KGL_S2_ANT04.2345m.c1082035	+	110	137	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-724	SA_S1_NOR08.45m.c10030363	-	789	762	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-725	KGL_S1_ANT02.95m.c10228337	-	406	379	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-726	JGI24024J18818.10002320	+	5869	5896	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-727	KVRMV2.100472114	-	249	222	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Tna-1-1	NZ_JTDFV01000005.1	+	417562	417589	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Pbu-1-1	NZ_AUDE01000014.1	+	155495	155522	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-728	KGL_S1_ANT01.95m.c10008907	-	926	899	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-729	KGL_S2_ANT06.2345m.c1016060	-	116	89	RNA→	
env-730	KGL_S2_ANT04.2345m.c1006248	-	1101	1074	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-731	KGL_S1_ANT02.95m.c10014716	-	776	749	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-732	SA_S1_NOR05.45m.c10011330	+	878	905	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-733	SA_S2_NOR15.50m.c10030572	+	1601	1628	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-734	SA_S1_NOR08.45m.c10005809	+	1419	1446	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-735	KGL_S2_ANT04.2345m.c1312501	-	63	36	RNA→	
env-736	SA_S2_NOR18.50m.1150586	-	220	193	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-737	KGL_S2_ANT04.2345m.c1135335	+	346	373	RNA→	
env-738	KGL_S1_ANT02.95m.c10003498	-	1873	1846	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-739	TDF_MC_ARG02.113m.c1071523	+	280	307	RNA→	←hypo
env-740	JGI24723J26617.10000135	+	62418	62445	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Ale-1-1	NZ_BBNQ01000002.1	+	52311	52338	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fic-1-1	NZ_KN525716.1	+	641421	641448	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-741	KGL_S1_ANT01.95m.c10145689	+	78	105	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-742	KGL_S1_ANT01.95m.c10094256	+	98	125	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-743	BS_KBA_SWE12.21m.c10430184	-	261	234	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-744	SA_S1_NOR08.45m.c10000775	+	7919	7946	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-745	SA_S2_NOR15.50m.c10050530	+	950	977	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-746	SA_S1_NOR08.45m.c10816085	+	12	39	RNA→	hypo→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-747	SA_S2_NOR15.50m.c10122310	+	573	546	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-748	KGL_S1_ANT01.95m.c10075767	+	706	733	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-749	KGL_S1_ANT02.95m.c10035975	-	1547	1520	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-750	ElkS_mat_MD6A.1000445	-	13256	13229	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-751	JGI11876J14442.10004783	-	7288	7261	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-752	JGI24025J20009.10002662	+	3106	3133	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-753	JGI24724J26744.10000817	-	7312	7285	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-754	JGI24723J26617.10075658	+	845	872	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Ale-1-2	NZ_BBN01000009.1	-	60878	60851	RNA→	hypo→ hypo→
Wsp-1-1	NZ_AP014583.1	+	217643	217670	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-755	DelMOSum2011.c10001390	+	13601	13628	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-756	BS_KBA_SWE12.21m.c10000778	-	8562	8535	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-757	BS_KBB_SWE26.205m.c1007554	+	1145	1172	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-758	BS_KBA_SWE07.21m.c1035024	-	470	443	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-759	BS_KBA_SWE21.205m.10000389	-	3010	2983	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-760	BS_KBA_SWE02.21m.10003979	+	3505	3532	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-761	SA_S1_NOR05.45m.c10404754	-	237	210	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→

env-762	SA_S1_NOR08_45m.c10035522	+	438	465	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-763	SA_S2_NOR15_50m.c10123094	+	331	358	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-764	SA_S2_NOR15_50m.c10622339	-	159	132	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-765	BS_KBA_SWE02_21m.10429781	+	153	180	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-766	JGI24723J26617_10219199	+	387	414	RNA→	hypo→
Pda-1-1	NZ_LXJO1000016.1	-	240145	240118	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fba-7-1	NZ_ALIH01000012.1	+	102806	102833	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-767	SA_S2_NOR13_50m.c1039248	+	208	235	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-768	SA_S1_NOR05_45m.c10021836	-	1574	1547	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-769	SA_S1_NOR08_45m.c10009016	-	4028	4001	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-770	SA_S2_NOR15_50m.c10078015	-	652	625	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-771	TB_PC08_66_10107273	+	586	613	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-772	BS_KBA_SWE12_21m.c10659546	+	51	78	RNA→	hypo→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-773	TB_PC08_64_1001738	+	2654	2681	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-774	TB_FS06_10DRAFT_1005018	+	3980	4007	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-775	TB_PC08_66_10001095	+	2574	2601	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-776	TB_GS10_10_10000237	+	23689	23716	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-777	TB_GS10_10_10014454	-	4102	4075	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-778	TB_GS09_5_10009762	+	4122	4149	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-779	TB_PC08_3_1001100	-	12933	12906	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-780	JGI24723J26617_10196616	+	45	72	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-781	JGI20151J14362_10404994	+	205	232	RNA→	
env-782	JGI20155J14468_10372448	+	233	260	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-783	3300001592_10000620	-	7266	7239	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-784	GBANfinal_contig20918	+	428	455	RNA→	
Tse-1-1	NZ_JTDW01000005.1	+	217195	217222	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-785	SA_S1_NOR05_45m.c10008190	-	2600	2573	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-786	SA_S1_NOR08_45m.c10005913	-	109	82	RNA→	←hypo
env-787	SA_S2_NOR15_50m.c10028300	-	1363	1336	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-788	CEQZ01051997.1	-	539	512	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-789	CERU01034551.1	-	2620	2593	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-790	JGI24025J20009_10046633	+	1505	1532	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Psp-4-1	NZ_JUGU01000001.1	+	1535967	1535994	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fsp-13-1	NZ_ANLA01000019.1	-	4070	4043	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-791	CEQG01218791.1	+	295	322	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-792	CERD01073987.1	+	168	195	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-793	JGI11876J14442_10006999	+	7283	7310	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-794	JGI24723J26617_10011294	+	1041	1068	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Jpa-1-1	NZ_BBNS01000022.1	+	50201	50228	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Pja-1-1	NZ_JSWG01000016.1	+	19956	19983	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-795	BS_KBA_SWE02_21m.10588502	+	82	109	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-796	JGI11876J14442_10024983	+	2546	2573	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-797	KVRMV2_101767380	+	513	540	RNA→	
Pme-1-1	NZ_JXJP01000027.1	-	9100	9073	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-798	SA_S1_NOR08_45m.c10161364	-	92	65	RNA→	←hypo
env-799	ElkS_mat_MD6A_1031343	-	868	841	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Jpa-1-2	NZ_BBNR01000023.1	-	12164	12137	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Jpa-1-3	NZ_BBNY01000007.1	+	50312	50339	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-800	DelMOSum2010_c10067390	-	753	726	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-801	JGI20154J14316_10000408	+	38586	38613	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-802	JGI20160J14292_10000275	+	38583	38610	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-803	JGI20157J14317_10000632	+	26198	26225	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→

env-804	JGI24724J26744_10000045	-	14321	14294	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-805	JGI20157J14317_10002549	+	15190	15217	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-806	JGI24724J26744_10018347	-	3457	3430	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-807	JGI20153J14295_10046331	-	387	360	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-808	JGI20153J14318_10046331	-	387	360	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-809	SA_S1_NOR08_45m_c10278240	-	201	174	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-810	JGI20154J14316_10043409	+	1626	1653	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-811	JGI20157J14317_10008721	-	382	355	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-812	2236876003_126260	-	373	346	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-813	JGI20151J14362_10005078	-	176	149	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-814	JGI20156J14371_10014418	+	4045	4072	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-815	JGI20160J14292_10615073	-	221	194	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-816	JGI20158J14315_10346697	+	250	277	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-817	CERM01179909.1	-	111	84	RNA →
env-818	JGI24025J20009_10452841	-	33	6	RNA →
env-819	LAZR01000052.1	+	53070	53097	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-820	JGI24723J26617_10040665	+	256	283	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-821	KGI_S2_ANT06_2345m_c1000032	-	27425	27398	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-822	KGI_S2_ANT04_2345m_c1056173	+	342	369	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-823	JGI24723J26617_10586359	+	61	88	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Msp-1-1	NZ_JHZW01000003.1	+	1124580	1124607	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-824	JCVI_SCAF_1101668691466	-	995	968	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
Ksp-1-1	NC_015496.1	-	2413193	2413166	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-825	JCVI_SCAF_1096627091268	-	3048	3021	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-826	CENF01107965.1	+	887	914	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-827	CENT01102842.1	-	285	258	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-828	CEOF01364937.1	+	159	186	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-829	CESM01052670.1	+	1148	1175	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-830	CETQ01129049.1	-	6191	6164	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-831	CEVP01064703.1	+	384	411	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-832	CEWG01096248.1	-	610	583	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
Ddo-1-1	NZ_JSAQ01000001.1	-	3054937	3054910	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Dsp-1-1	NZ_CP009301.1	-	3150857	3150830	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-833	JGI20152J14361_10000826	-	19357	19330	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) →
env-834	JGI20151J14362_10000089	+	3724	3751	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) →
env-835	JGI20156J14371_10084791	-	1014	987	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-836	JGI20160J14292_10018282	+	2194	2221	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) →
env-837	JGI20153J14295_10086476	+	211	238	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-838	JGI20153J14318_10086476	+	211	238	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-839	JGI20159J14440_10043604	-	1010	983	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) → PTZ00435 (PTZ00435) →
env-840	JGI20154J14316_10041093	+	2028	2055	RNA → ← hypo
env-841	CERK01035414.1	+	22	49	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) →
env-842	JGI20156J14371_10216168	-	35	8	CarbopepD_reg_2 (pfam13715) →
env-843	JGI20157J14317_10031126	+	717	744	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) →
env-844	JGI20155J14468_10062223	-	1029	1002	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-845	JGI20158J14315_10013594	+	3165	3192	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-846	CESO01100995.1	+	886	913	RNA →
env-847	JGI20156J14371_10185819	-	95	68	RNA →
env-848	JGI20157J14317_10068544	+	454	481	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-849	JGI20155J14468_10063464	-	1018	991	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-850	2236876010_0174543	-	309	282	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-851	SI47jul10_100m.c1048908	-	444	417	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-852	SI60aug11_100m.c1000269	-	14900	14873	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → CirA (COG1629)PRK10064 (PRK10064)CarbopepD_reg_2 (pfam13715) → DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → ThrS (COG0441)thrS (PRK00413)TGS (pfam02824) → InfC (COG0290)InfC (PRK00028) → rpmI (PRK00172)Ribosomal_L35p (pfam01632) → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-853	SI60aug11_100m.c1000276	+	16471	16498	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-854	SI34jun09_10m_1000015	-	14900	14873	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → CirA (COG1629)PRK10064 (PRK10064)CarbopepD_reg_2 (pfam13715) → DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → ThrS (COG0441)thrS (PRK00413)TGS (pfam02824) → InfC (COG0290)InfC (PRK00028) → rpmI (PRK00172)Ribosomal_L35p (pfam01632) → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-855	SI34jun09_120m_1001069	+	4978	5005	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → CirA (COG1629)PRK10064 (PRK10064)CarbopepD_reg_2 (pfam13715) → DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → tRNA_SAD (smart00863)ThrS (COG0441)TGS (pfam02824) →
env-856	SI34jun09_135m_1006065	-	2206	2179	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → CarbopepD_reg_2 (pfam13715) →
env-857	SI36aug09_100m_1042710	+	81	108	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-858	SI34jun09_100m_1000078	+	35369	35396	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064)Plug (pfam07715)CarbopepD_reg_2 (pfam13715) →
env-859	SI48aug10_100m_1000414	-	12190	12163	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → CirA (COG1629)PRK10064 (PRK10064)CarbopepD_reg_2 (pfam13715) → DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → ThrS (COG0441)thrS (PRK00413)TGS (pfam02824) → InfC (COG0290)InfC (PRK00028) → rpmI (PRK00172)Ribosomal_L35p (pfam01632) → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-860	CERW01115635.1	-	4803	4776	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → CirA (COG1629)Plug (pfam07715)CarbopepD_reg_2 (pfam13715)OMP_b-brl.3 (pfam14905) → DUF4249 (pfam14054) →
env-861	JCVI_READ_1105430340115	+	255	282	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-862	DelMOSum2010_c10759857	-	116	89	RNA → hypo →
env-863	DelMOSum2011_c10081878	+	954	981	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-864	SI48aug10_10m.c1014029	+	16	43	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-865	PML_READ_01299143	+	134	161	RNA →
env-866	2236876010_0240919	+	325	352	RNA →
env-867	JGI20157J14317_10001218	-	14738	14711	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → CirA (COG1629)PRK10064 (PRK10064)CarbopepD_reg_2 (pfam13715) → DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → ThrS (COG0441)thrS (PRK00413)TGS (pfam02824) → InfC (COG0290)InfC (PRK00028) → rpmI (PRK00172)Ribosomal_L35p (pfam01632) → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-868	NCBI_BBAY_READ_1106105285287	+	249	276	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-869	DelMOSum2010_c10181064	-	71	44	RNA →
env-870	DelMOSum2010_c10631757	-	229	202	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-871	SI36aug09_100m_1082667	-	291	264	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-872	SI34jun09_100m_1043923	-	717	690	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-873	JGI20156J14371_10000105	-	20092	20065	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-874	JGI20160J14292_10261268	-	452	425	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-875	JGI20155J14468_10000942	-	20092	20065	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-876	CERI01041892.1	-	67	40	RNA →
env-877	CETY01197871.1	+	10782	10809	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-878	CEWO01125901.1	-	186	159	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-879	F10SI0310a_Sequence0000036835	-	83	56	RNA →
env-880	F10SI03100a_Sequence0000055496	+	990	1017	RNA →
env-881	CETY01434901.1	+	139	166	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-882	JGI20154J14316_10005236	+	6892	6919	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-883	JGI20155J14468_10106440	+	886	913	RNA →

env-884	SI60aug11_100m_c1103194	+	244	271	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-885	SI48aug10_10m_c1005211	-	1208	1181	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-886	SI34jun09_10m_1014940	+	226	253	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-887	SI34jun09_120m_1058221	-	543	516	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-888	SI34jun09_135m_1193559	+	232	259	RNA →
env-889	JGI20151J14362_10577636	-	201	174	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-890	JGI20157J14317_10006145	-	8612	8585	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-891	SI48aug10_100m_1000052	+	30997	31024	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-892	JGI20157J14317_10006052	-	4424	4397	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-893	2236876001_145660	-	390	363	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-894	JCVI_SCAF_1096627080844	+	1234	1261	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064) Plug (pfam07715)CarbopepD_reg.2 (pfam13715) →
env-895	DelMOWin2010_c10059332	+	366	393	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-896	CENF01410679.1	+	457	484	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-897	CENT01071942.1	+	440	467	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064) TonB_dep_Rec (pfam00593) Plug (pfam07715)CarbopepD_reg.2 (pfam13715) OMP_b-brl_3 (pfam13715) → DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo →
env-898	CEOP01008385.1	-	7910	7883	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064) TonB_dep_Rec (pfam00593) Plug (pfam07715)CarbopepD_reg.2 (pfam13715) OMP_b-brl_3 (pfam13715) → DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-899	CERW01135648.1	+	187	214	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-900	CESF01017371.1	-	1161	1134	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-901	CESM01027070.1	+	3699	3726	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064) TonB_dep_Rec (pfam00593) Plug (pfam07715)CarbopepD_reg.2 (pfam13715) OMP_b-brl_3 (pfam13715) → DUF4249 (pfam14054) →
env-902	CESO01004564.1	+	1551	1578	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064) TonB_dep_Rec (pfam00593) Plug (pfam07715)CarbopepD_reg.2 (pfam13715) OMP_b-brl_3 (pfam13715) → DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) →
env-903	CEVS01180975.1	-	1250	1223	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-904	CEVU01367992.1	-	1403	1376	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-905	CEWG01218791.1	-	8217	8190	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064) TonB_dep_Rec (pfam00593) Plug (pfam07715)CarbopepD_reg.2 (pfam13715) OMP_b-brl_3 (pfam13715) → DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-906	NCBI_READ_1112493833240	+	25	52	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-907	CESE01052974.1	+	1100	1127	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-908	CESJ01033277.1	+	1112	1139	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-909	CEST01137492.1	+	594	621	RNA → hypo →
env-910	DelMOSum2011_c10014222	+	400	427	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064) TonB_dep_Rec (pfam00593) Plug (pfam07715)CarbopepD_reg.2 (pfam13715) →
env-911	DelMOSum2011_c10064936	+	400	427	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-912	CESU01016977.1	-	4567	4540	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064) TonB_dep_Rec (pfam00593) Plug (pfam07715)CarbopepD_reg.2 (pfam13715) → DUF4249 (pfam14054) →
env-913	LPjun09P1210m_c1060279	-	297	270	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-914	DelMOSum2010_c10056893	-	591	564	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-915	PML_READ_00864574	+	212	239	RNA →
env-916	CEPZ01008967.1	-	10616	10589	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-917	SRS015278_C1831448	+	482	509	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-918	SRS024649_C3604464	+	494	521	RNA →
Fba-4-1	NZ_ABH101000004.1	+	89845	89872	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-919	NCBI_BBAY_READ_1105731251167	-	848	821	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →

env-920	CESI01073316.1	-	585	558	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-921	CESU01070521.1	-	784	757	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-922	Antartic2_1088051	-	150	123	RNA→	hypo→
env-923	2236876011_158566	+	32	59	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-924	2236876009_152251	-	387	360	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-925	JGI24723J26617_10000165	-	51447	51420	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-926	JGI24024J18818_10020607	-	2387	2360	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-927	LGVF01309355.1	+	1747	1774	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-928	TDF_MC_ARG01_113m_c1056626	-	258	231	RNA→	hypo→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Ffi-1-1	NZ_AUDM01000017.1	-	30024	29997	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-929	KGL_S1_ANT01_95m_c10018333	-	2431	2404	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ hypo→
env-930	KGI_S2_ANT04_2345m_c1018541	+	769	796	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-931	KGI_S1_ANT02_95m_c10051843	-	1116	1089	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fba-8-1	NZ_AFPK01000067.1	+	24608	24635	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-932	SA_S2_NOR18_50m_1003007	+	2084	2111	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-933	SA_S2_NOR13_50m_c1000705	+	3191	3218	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-934	SA_S1_NOR05_45m_c10004569	-	1775	1748	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ hypo→
env-935	SA_S1_NOR08_45m_c10000086	+	11623	11650	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-936	SA_S2_NOR15_50m_c10001702	+	8902	8929	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-937	SA_S1_NOR02_45m_c1057368	+	341	368	RNA→	←hypo
env-938	JGI20157J14317_10496092	+	266	293	RNA→	
Cca-1-1	NZ_CDO01000142.1	+	52361	52388	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Cca-1-2	NZ_CDOH01000131.1	-	1703	1676	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Cca-1-3	NZ_CDOL01000061.1	+	11126	11153	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-939	JGI25913J50563_1214264	-	110	83	RNA→	hypo→
env-940	KVRMV2_100094982	+	521	548	RNA→	
env-941	KVRMV2_100096620	+	400	427	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-942	KVRMV2_102215955	+	253	280	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Emi-1-1	NZ_CP011059.1	-	192039	192012	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ Nudix_Hydrolase_31 (cd04690)NUDIX_4 (pfam14815)→
Wma-1-1	NZ_CCMH01000053.1	-	16198	16171	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-943	P_2C_Liq_1_UnCty_1237069	+	47	74	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-944	P_1C_Liq_1_UnCty_1029662	+	212	239	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-945	CESF01128812.1	-	1808	1781	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ PRK08299 (PRK08299)→
env-946	CES001022412.1	+	665	692	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ PRK08299 (PRK08299)→
env-947	CEOP01454573.1	+	1970	1997	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-948	CEWO01198114.1	+	1577	1604	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ PRK08299 (PRK08299)→
env-949	CERI01052802.1	+	1424	1451	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-950	CETY01032138.1	+	785	812	RNA→	
env-951	JGI20152J14361_10010744	-	1575	1548	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-952	JGI20151J14362_10033063	+	947	974	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-953	JGI20157J14317_10018646	+	2505	2532	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-954	2236876010_0376568	+	129	156	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-955	2236876010_0173724	+	243	270	RNA→	hypo→
env-956	JGI20156J14371_10012147	+	2603	2630	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-957	2236876010_0038631	+	246	273	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ hypo→
env-958	2236876010_0065632	-	228	201	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-959	DelMOWin2010_c10348025	-	98	71	RNA→	
env-960	JGI20154J14316_10016038	+	2890	2917	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-961	JGI20160J14292_10020040	+	2336	2363	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-962	JGI20153J14295_10012810	+	2889	2916	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-963	JGI20153J14318_10012810	+	2889	2916	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-964	JGI20159J14440_10003663	-	8129	8102	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→

env-965	JGI20159J14440.10003889	+	6429	6456	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-966	JGI20155J14468.10099882	-	830	803	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-967	JGI20158J14315.10032857	-	673	646	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-968	2236876010.0093675	+	11	38	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-969	2236876010.0167969	+	65	92	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-970	DelMOSum2011_c10093048	-	801	774	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-971	DelMOSum2011_c10001686	-	6899	6872	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-972	SI34jun09_10m_1096433	-	156	129	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-973	CERM01034613.1	-	664	637	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-974	2236876009.179996	-	147	120	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-975	2236876010.0260662	+	145	172	RNA	→		
env-976	NCBI_READ_1112749174365	+	12	39	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-977	P_2C_Liq_3_UnCty_100987	+	228	257	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-978	P_2C_Liq_1_UnCty_1005821	+	3392	3421	RNA	→	hypo	→
env-979	P_2C_Liq_2_UnCty_1021870	+	790	819	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-980	JGI20154J14316.10003986	-	1590	1561	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-981	JGI20153J14295.10004614	+	8389	8418	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-982	JGI20153J14318.10004614	+	8389	8418	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-983	JGI20152J14361.10000338	+	14595	14624	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-984	JGI20156J14371.10003171	+	2644	2673	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-985	JGI20154J14316.10025201	-	1474	1445	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-986	JGI20153J14295.10003738	+	9965	9994	RNA	→		
env-987	JGI20153J14318.10003738	+	9965	9994	RNA	→		
env-988	P_2C_Liq_1_UnCty_1000289	-	21098	21069	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
Psp-2-1	NZ_JHZZ01000001.1	-	2913763	2913734	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-989	CESI01065175.1	+	1901	1930	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-990	CESU01059413.1	+	594	623	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-991	JGI20152J14361.10000044	-	80594	80565	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-992	JGI20153J14295.10523871	-	70	41	RNA	→	←hypo	
env-993	JGI20153J14318.10523871	-	70	41	RNA	→	←hypo	
env-994	DelMOWin2010_c10731323	+	65	94	RNA	→	←hypo	
env-995	JGI20156J14371.10483843	+	180	209	RNA	→	←hypo	
env-996	JGI20159J14440.10053546	+	607	636	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-997	NCBI_READ_1112777322026	-	870	841	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-998	NCBI_READ_1112637402410	+	418	447	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-999	NCBI_READ_1112614318228	-	194	165	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1000	CESE01039129.1	+	14427	14456	RNA	→		
env-1001	CESJ01285814.1	-	2842	2813	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1002	CEST01030576.1	-	89	60	RNA	→		
Pir-1-1	NZ_CH724148.1	+	36399	36428	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1003	BS_KBA_SWE12.21m_c10085874	+	203	230	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1004	BS_KBB_SWE26.205m_c1058109	+	165	192	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1005	BS_KBA_SWE21.205m_10102186	+	146	173	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1006	BS_KBA_SWE02.21m_10115347	-	438	411	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1007	NCBI_READ_1112494184882	-	125	96	RNA	→		
env-1008	NCBI_READ_1112637830883	+	552	581	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1009	DelMOSum2010_c10000424	-	11560	11531	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1010	JGI20157J14317.10004444	-	857	828	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1011	NCBI_READ_1112493603404	+	47	76	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1012	NCBI_READ_1112493503141	+	144	173	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1013	NCBI_READ_1112788476902	+	509	538	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1014	CEWR01020717.1	-	6341	6312	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→

env-1015	CESJ01043971.1	+	1219	1246	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1016	2236876002.177911	-	239	210	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1017	DelMOSum2010_c10001649	-	15644	15615	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1018	JGI20154J14316_10032387	+	2473	2502	RNA → ← hypo
env-1019	JGI20153J14295_10012199	+	4050	4079	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1020	JGI20153J14318_10012199	+	4050	4079	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1021	SI34jun09_10m_1071064	+	169	198	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1022	A09P0410a_Sequence0000002007	-	383	354	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1023	JGI20154J14316_10036828	+	484	513	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1024	JGI20160J14292_10414066	+	250	221	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1025	CESI01082352.1	+	317	346	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1026	JGI20160J14292_10063069	+	592	621	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1027	CESD01219058.1	+	576	603	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1028	CETB01155201.1	+	708	735	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1029	CETH01045262.1	+	30526	30553	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1030	CETM01203845.1	+	3063	3090	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1031	CETT01281088.1	+	569	596	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1032	CEUL01311114.1	-	456	429	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1033	CEUZ01290455.1	+	1300	1327	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1034	SI60aug11_100m_c1007508	-	2548	2519	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1035	JGI20152J14361_10003189	+	8383	8354	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1036	JGI20153J14295_10000489	+	27052	27081	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1037	JGI20153J14318_10000489	+	27052	27081	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Psp-1-1	NZ_JPDI01000001.1	-	2860067	2860038	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1038	CEOP01247711.1	-	5731	5704	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1039	2236876001_262712	-	39	11	RNA → hypo →
env-1040	CERB01093551.1	+	315	342	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1041	CERS01312156.1	+	272	299	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1042	NCBI_READ_1112290446392	+	322	351	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1043	NCBI_READ_1112493493141	+	227	256	RNA →
env-1044	CESE01277103.1	-	107	78	RNA →
env-1045	CEST01047642.1	+	9823	9852	RNA →
env-1046	CEWR01079815.1	+	9821	9850	RNA →
env-1047	NCBI_READ_1112777250419	-	310	281	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1048	KGI_S2_ANT05_2345m_c1212107	-	177	148	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1049	P_2C_Liq_3_UnCty_100705	-	3459	3430	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1050	P_2C_Liq_1_UnCty_1002384	-	5606	5577	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1051	P_2C_Liq_2_UnCty_1024292	-	447	418	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1052	NCBI_READ_1112788537198	-	239	210	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1053	NCBI_READ_1112493844367	-	655	626	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1054	NCBI_READ_1112679247542	+	278	307	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1055	CESI01042215.1	+	703	732	RNA →
env-1056	CESJ01095310.1	-	463	434	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1057	NCBI_READ_1112493752993	-	840	812	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1058	NCBI_READ_1112777271421	+	338	367	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Wvi-1-1	NC_015144.1	+	358414	358441	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1059	BGMT1_NODE_590531	-	606	579	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1060	HBC_scaff_10036577	+	20118	20145	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-1061	HBC_ctgs_1000111	-	333	306	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fbr-1-1	NC_016001.1	-	3443259	3443232	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1062	BS_KBA_SWE02_21m_10304347	+	145	172	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1063	P_1C_Liq_1_UnCty_1096570	-	282	255	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1064	JGI25910J50241_10412907	-	135	108	RNA→	hyppo→
env-1065	JGI25920J50251_10025281	+	980	1007	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1066	GXP7IEG01AS1FF	-	340	313	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1067	GXP7IEG01AL3G3	+	149	176	RNA→	
env-1068	ElkS_mat_MD6A_1173344	+	220	247	RNA→	
env-1069	JGI11876J14442_10000405	-	30539	30512	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Iha-1-1	NZ_AJJU01000006.1	-	7932	7905	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1070	CEQG01145189.1	+	73521	73548	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1071	CETR01067878.1	+	322	349	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1072	CERQ01241836.1	+	41	68	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1073	SA_S1_NOR08_45m_c10570168	+	216	243	RNA→	
env-1074	SA_S1_NOR08_45m_c10657421	-	214	187	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fjo-1-1	NC_009441.1	-	2640521	2640494	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1075	KGI_S2_ANT06_2345m_c1002444	+	3037	3064	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1076	BS_KBA_SWE12_21m_c10001565	-	7677	7650	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1077	BS_KBB_SWE26_205m_c1000550	-	7615	7588	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1078	BS_KBA_SWE21_205m_10000090	+	19045	19072	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1079	BS_KBA_SWE02_21m_10000113	-	8549	8522	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1080	SL_9KL_010_SED_10011059	+	964	991	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1081	BS_KBA_SWE12_21m_c10000952	+	3392	3419	RNA→	←-hyppo
env-1082	BS_KBB_SWE26_205m_c1003233	-	1828	1801	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1083	BS_KBA_SWE02_21m_10008514	+	1890	1917	RNA→	←-hyppo
env-1084	LWSO_GLQAYWI01D9JTG	+	68	95	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Sxi-1-1	NZ_AUIG01000022.1	-	52581	52554	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1085	JGI25910J50241_10309536	-	48	21	RNA→	
env-1086	JGI25920J50251_10000309	-	8552	8525	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1087	JGI25914J50564_10400042	+	203	230	RNA→	←-hyppo
env-1088	JGI24770J26754_10001491	+	8389	8416	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1089	JGI25917J50250_1002458	+	3566	3593	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1090	JGI25914J50564_10000033	-	2824	2797	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Gli-1-1	NZ_JH594606.1	+	1012580	1012607	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1091	SL_7KL_010_BRINE_10005701	-	3752	3725	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1092	JGI25920J50251_10215690	-	222	195	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1093	JGI25914J50564_10165301	-	359	332	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1094	JGI25914J50564_10198338	-	73	46	RNA→	
env-1095	JGI25913J50563_1230681	-	286	259	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1096	BS_KBA_SWE21_205m_10014821	-	1943	1916	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1097	JGI25912J50252_10330425	-	38	11	RNA→	
env-1098	CENH01045038.1	+	3	30	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1099	CETA01060825.1	-	2104	2077	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1100	CETB01301347.1	+	490	517	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1101	CETT01089007.1	-	2908	2881	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1102	CEVJ01064547.1	+	730	757	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1103	CEWI01163115.1	+	358	385	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1104	KGI_S1_ANT01_95m_c10228781	-	190	163	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1105	KGI_S1_ANT02_95m_c10005113	+	4522	4549	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1106	CERE01034022.1	+	347	374	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1107	CENS01098701.1	-	541	514	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→

env-1108	CEPZ01082641.1	-	112	85	RNA→
env-1109	CEQY01232939.1	-	234	207	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1110	CERQ01070756.1	-	1060	1033	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1111	CERU01112183.1	-	9021	8994	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1112	CESC01027484.1	+	19541	19568	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1113	CEUN01369745.1	+	390	417	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
Lbl-1-1	NZ_CH672395.1	-	1844571	1844544	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
Aag-1-1	NZ_JH621256.1	-	89135	89108	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
Ead-1-1	NZ_KB907548.1	-	10231	10204	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1114	TahiMoana_1000007	-	24341	24314	RNA→ ←-hypo
env-1115	topACOD_FV90NF401A1PKH	-	248	221	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
Lsp-2-1	NZ_JYNQ01000001.1	+	1019925	1019952	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1116	CESE01078901.1	+	29392	29419	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1117	CEST01016161.1	+	29395	29422	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
Lsp-3-1	NZ_JHZY01000002.1	+	1633784	1633811	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1118	CEQG01152154.1	+	3057	3084	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1119	CEVJ01105358.1	-	124	97	RNA→ hypo→
env-1120	CEVO01225740.1	-	100	73	RNA→
env-1121	JGI12097J13213.1000092	+	32172	32199	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1122	JGI11800J13271.1071213	-	166	139	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1123	CESO01260573.1	+	553	580	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
Lja-1-1	NZ_JSWF01000016.1	-	442	415	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
Lsp-1-1	NC_015638.1	+	16178	16205	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1124	CEPG01053707.1	+	643	670	RNA→
Pto-1-1	NC_018721.1	-	3532395	3532368	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
Pgo-1-1	NZ_APLF01000012.1	-	7252	7225	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1125	LV_Brine.h2.0102.1076663	-	420	393	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1126	JGI1221J11331.1011062	-	813	786	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1127	P_1C_Liq_1_UnCty_1029884	-	249	222	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1128	P_2C_Liq_2_UnCty_1118043	+	295	322	RNA→ ←-hypo
Ptr-1-1	NZ_KB905345.1	+	151414	151441	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1129	SL_9KL_010_SED.10069806	+	146	173	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1130	P_2C_Liq_1_UnCty_1186584	-	277	250	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1131	P_1C_Liq_2_UnCty_1015821	+	305	332	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1132	JGI25910J50241.10010778	-	306	279	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1133	JGI25920J50251.10125176	+	96	123	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1134	CEPR01006195.1	+	270508	270535	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1135	CERJ01067812.1	+	321	348	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1136	JGI25911J50253.10012314	+	1397	1424	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
Gsp-4-1	NZ_JQLP01000003.1	-	9409	9382	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1137	JGI24770J26754.10341917	-	46	19	RNA→ ←-hypo
env-1138	JGI24770J26754.10005581	+	5539	5566	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1139	JGI24723J26617.10022857	+	2227	2254	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1140	M3P_c10140209	-	55	28	RNA→ ←-hypo
env-1141	JGI1221J11331.1121684	-	169	142	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1142	JFJP01038398.1	+	17693	17720	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1143	JGI26054J46599.1167877	+	72	99	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1144	LWFCAN_N_GO09JKT02FQCFO	+	32	59	RNA→ hypo→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1145	LM20APR2010E_c18959	-	172	145	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1146	KGL_S1_ANT02.95m_c10072419	-	199	172	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1147	JGI1221J11331.1000410	+	13452	13479	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1148	JGI24770J26754.10209365	+	67	94	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→

env-1149	LWAEeNNiAF_GBUVFP102GIQM4	-	107	80	RNA→ ←-hypo
env-1150	GXP7IEG01DK1RD	+	62	89	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1151	TB_FS08_3DRAFT_1076085	-	419	392	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1152	KGI_S1_ANT02_95m_c10077220	+	767	794	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1153	SR_TTP_S3_1011262	-	257	230	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1154	SR_TP_S1sol_1004373	+	1564	1591	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1155	CETR01086737.1	-	288	261	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1156	CEVJ01064574.1	-	35932	35905	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1157	CEVK01071768.1	-	2531	2504	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1158	CEVM01085059.1	-	146813	146786	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1159	CEVO01080562.1	-	4295	4268	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1160	CEVQ01352678.1	+	1996	2023	RNA→
env-1161	JGI12421J11937_10000023	-	29464	29437	RNA→ ←-hypo
env-1162	JGI25911J50253_10733752	-	166	139	RNA→ hypo→
env-1163	_GVICOHK01DYU3D	-	65	38	RNA→ hypo→
env-1164	KGI_S1_ANT02_95m_c10073298	+	760	787	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1165	LV_Brine_h2_0102_1044952	+	61	88	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1166	PBR_1111292	+	3885	3912	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ hypo→ hypo→
env-1167	JGI25910J50241_10023455	+	23	50	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1168	LWFCAn_GLO1YSU01DQOFC	-	166	139	RNA→ hypo→
Fso-1-1	NZ_AUGO01000009.1	+	122444	122471	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1169	TB_PC08_66_10000538	+	14971	14998	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1170	TB_GS10_10_10217433	+	384	411	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1171	TB_PC08_64_1080822	-	480	453	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1172	CESI01032264.1	+	1988	2015	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1173	CESU01010912.1	+	7776	7803	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1174	Antartic2_1044867	-	57	30	RNA→ hypo→
env-1175	JGI20156J14371_10138076	-	258	231	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1176	JGI20154J14316_10002203	-	374	347	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1177	JGI20160J14292_10013217	+	567	594	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1178	JGI20153J14295_10047621	-	358	331	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1179	JGI20153J14318_10047621	-	358	331	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1180	JGI20157J14317_10000793	-	151	124	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1181	CERM01033640.1	+	3672	3699	RNA→
env-1182	CESO01224126.1	+	67	40	RNA→
env-1183	CERM01182019.1	+	636	663	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1184	CESO01277244.1	-	422	395	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1185	DelMOSum2010_c10004802	+	3737	3764	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1186	LPaug08P2610m_c1071471	-	214	187	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1187	JGI20154J14316_10001372	-	183	156	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1188	JGI20153J14295_10000027	-	965	938	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1189	JGI20153J14318_10000027	-	965	938	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1190	JGI20160J14292_10003823	+	1395	1422	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1191	DelMOSum2010_c10005021	-	5906	5879	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1192	LPaug09P1610m_c1163453	-	115	88	RNA→ hypo→
env-1193	JGI20154J14316_10016259	-	2513	2486	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1194	JGI20153J14295_10112779	-	627	600	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1195	JGI20153J14318_10112779	-	627	600	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1196	JGI20157J14317_10641510	-	167	140	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1197	JGI20154J14316_10003287	+	9143	9170	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1198	JGI20157J14317_10237281	-	352	325	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1199	CESF01069914.1	+	3709	3736	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→

env-1200	3300001197_1005977	+	3403	3430	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1201	3300001197_1015663	+	4060	4087	RNA→	← monomer_idh (TIGR00178)IDH (pfam03971)
env-1202	JGI24723J26617_10020059	-	30	3	RNA→	
env-1203	DelMOSum2011_c10017080	+	3029	3056	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1204	A09P04_1300_Sequence0000012002	+	1343	1370	RNA→	hypo→
Apa-1-1	NZ_JACC01000002.1	+	197695	197722	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1205	SI39nov09_120m_c1067562	+	410	437	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1206	CESI01135903.1	-	37	10	RNA→	
env-1207	CETR01240919.1	+	43	70	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ hypo→
env-1208	JGI24723J26617_10024281	-	2550	2523	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fba-6-1	NZ_AFPB01000181.1	-	41364	41337	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Aat-1-1	NZ_AQRA01000009.1	-	19513	19486	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1209	SA_S1_NOR08_45m_c10624926	-	92	65	RNA→	hypo→
env-1210	DelMOSum2010_c10001221	+	15564	15591	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1211	SI34jun09_10m_1058447	+	104	131	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1212	SI34jun09_100m_1143518	+	11	38	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1213	CERM01031204.1	-	3510	3483	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1214	CESO01003542.1	-	1110	1083	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1215	CEVO01049684.1	-	87	60	RNA→	
env-1216	3300001197_1020214	-	102	75	RNA→	← hypo
env-1217	JGI24724J26744_10266378	-	318	291	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1218	JGI24723J26617_10417056	-	210	183	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fag-1-1	NZ_HG315671.1	+	2869946	2869973	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1219	SA_S1_NOR08_45m_c10036615	-	52	25	RNA→	
env-1220	CERM01065147.1	-	4841	4814	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1221	CESU01000186.1	-	4638	4611	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1222	CEWR01293092.1	-	4692	4665	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1223	JGI24723J26617_10804348	-	30	3	RNA→	
Ame-1-1	NZ_JACB01000004.1	-	19600	19573	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1224	DelMOSum2010_c10203686	+	55	82	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1225	DelMOWin2010_c10009783	-	4961	4934	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1226	JGI20158J14315_10383416	+	217	244	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fsp-3-1	NZ_AJXL01000094.1	-	14222	14195	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1227	KGI_S1_ANT01_95m_c10053628	+	1010	1037	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1228	KGI_S2_ANT04_2345m_c1008646	+	1380	1353	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1229	KGI_S1_ANT02_95m_c10015121	-	1911	1938	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1230	KGI_S1_ANT01_95m_c10161490	+	312	339	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1231	JGI20157J14317_10035387	+	911	938	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ PRK08299 (PRK08299)→
env-1232	JGI20157J14317_10082171	+	919	946	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1233	SRS018157_Baylor_scaffold_84048	-	8172	8145	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG-UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→
env-1234	SRS051941_LANL_scaffold_40129	+	359	386	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1235	Buccal_mucosa_LANL_C64921346	+	256	283	RNA→	
env-1236	SRS052876_LANL_scaffold_53214	-	5451	5424	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG-UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→
env-1237	SRS015044_WUGC_scaffold_8201	+	78	105	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1238	SRS063603_LANL_scaffold_47458	+	2882	2909	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG-UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→
env-1239	SRS024087_C3545532	+	415	442	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)EXOIII (smart00479)→
env-1240	SRS063932_LANL_scaffold_104549	+	686	713	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG-UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→
env-1241	SRS011126_Baylor_scaffold_17978	+	2727	2754	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG-UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→

env-1242	SRS013252_C3667205	+	686	713	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)EXOIII (smart00479)→
env-1243	SRS013533_PGA_scaffold_50908	+	1008	1035	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1244	SRS015803_C2641419	-	493	466	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1245	SRS016360_Baylor_scaffold_62601	+	2151	2178	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→
env-1246	SRS018665_WUGC_scaffold_58455	+	2151	2178	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→
env-1247	SRS019128_WUGC_scaffold_49488	+	686	713	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1248	SRS024561_LANL_scaffold_36518	-	14316	14289	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→
env-1249	SRS045197_C3607834	-	1029	1002	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)EXOIII (smart00479)→
env-1250	SRS047113_C5335430	-	293	266	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1251	SRS063999_C3543586	+	260	287	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Csp-6-1	NZ_KB291246.1	+	15364	15391	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→
env-1252	SRS018157_Baylor_scaffold_18962	+	6563	6590	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1253	JGI24768J34885_10247260	+	433	460	RNA→
env-1254	JCVI_SCAF_1101668160045	+	894	921	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1255	SwRhRL2b_contig_2171902	+	1146	1173	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1256	PBDCA2_GBB5CE401BK0D1_left	+	27	54	RNA→
Fsu-1-1	NZ_JATV01000027.1	+	3805	3832	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1257	JGI25913J50563_1001466	+	819	846	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1258	3300000052_140975	-	3211	3184	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1259	G312J29652_10012531	-	1124	1097	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1260	KGLS1_ANT02_95m_c10000047	-	11017	10990	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1261	JGI24770J26754_10206717	+	89	116	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1262	TFO_HY_Contig_1126	+	12214	12241	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Msp-2-1	NZ_JQNJ01000001.1	+	4092805	4092832	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1263	P_1C_Sed_3_UnCty_1133928	-	236	209	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fco-1-1	NC_016510.2	+	2920503	2920530	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Ala-1-1	NZ_AUMK01000014.1	-	41792	41765	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1264	JGI24023J19991_10023870	-	1433	1406	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1265	JGI24724J26744_10048212	+	212	239	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1266	JGI24723J26617_10001125	-	19348	19321	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1267	TrichMG_c100001	-	14774	14747	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Wps-1-1	NZ_ATMR01000180.1	+	83347	83374	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1268	AglaG_GBVDVLI01B3NQO	-	163	136	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1269	ElkS_mat_MD6A_1003775	-	3249	3222	RNA→ ←hypo
env-1270	JGI11876J14442_10004776	-	3630	3603	RNA→ ←hypo
env-1271	CERE01152256.1	+	629	656	RNA→
Mze-1-1	NZ_AULQ01000006.1	-	14032	14005	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1272	JGI24723J26617_10002074	-	4096	4069	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Gpo-1-1	NZ_AUHF01000008.1	+	262596	262623	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Oma-1-1	NZ_JADR01000006.1	-	9045	9018	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1273	wf3_AHAI14839_x1	+	659	686	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1274	CEGD01004528.1	-	427	400	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1275	BS_KBA_SWE21_205m_10562486	-	229	202	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1276	wf3_Contig6796	+	1463	1490	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1277	CESF01053946.1	-	9020	8993	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1278	CESO01316884.1	+	263	290	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1279	JGI24724J26744_10002545	+	3020	3047	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fgi-1-1	NZ_JNCP01000011.1	+	2791	2818	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→

env-1280	KGI_S1_ANT01.95m.c10010682	+	3821	3848	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fde-1-1	NZ_KE384377.1	-	10971	10944	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fsp-8-1	NZ_JQJY01000004.1	+	576152	576179	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Ffr-2-1	NZ_AHKF01000018.1	-	29890	29863	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fsp-7-1	NZ_AKZQ01000002.1	-	95707	95680	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fch-1-1	NZ_JASY01000001.1	+	715110	715137	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fsp-2-1	NZ_LEKS01000006.1	-	39097	39070	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Ffr-1-1	NZ_AUDO01000011.1	-	15707	15680	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fre-1-1	NZ_JPRL01000001.1	+	2564906	2564933	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1281	SA_S1_NOR08_45m.c10539000	-	115	88	RNA → hypo →
Osp-1-1	NZ_KI912445.1	-	8860	8833	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Osp-2-1	NZ_JADT01000012.1	-	9076	9049	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1282	BS_KBA_SWE12_21m.c10000785	-	8390	8363	RNA → ←hypo
env-1283	BS_KBB_SWE26_205m.c1003525	+	489	516	RNA → ←hypo
env-1284	BS_KBA_SWE21_205m.10009165	+	1230	1257	RNA → ←hypo
env-1285	BS_KBA_SWE02_21m.10000834	-	8439	8412	RNA → ←hypo
Ssp-2-1	NZ_JHZX01000001.1	-	3745903	3745876	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1286	CEUX01158018.1	-	198	171	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fsp-4-1	NZ_JSYM01000007.1	+	139958	139985	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fsp-10-1	NZ_JXQR01000051.1	+	159915	159942	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1287	KGI_S1_ANT01.95m.c10011075	+	3112	3139	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1288	KGI_S2_ANT04_2345m.c1004935	-	4516	4489	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1289	KGI_S1_ANT01.95m.c10002779	-	5614	5587	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1290	KGI_S2_ANT04_2345m.c1005141	-	4576	4549	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Gsp-2-1	NZ_APHJ01000024.1	+	94820	94847	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fsp-9-1	NZ_JARP01000001.1	-	168990	168963	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1291	KGI_S1_ANT01.95m.c10032372	+	345	372	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1292	KGI_S2_ANT04_2345m.c1037950	+	215	242	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1293	ElkS_mat_MD6A_1029448	-	765	738	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1294	JGI11876J14442_10227469	-	312	285	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1295	JGI11876J14442_10329633	-	316	289	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1296	JGI24770J26754_10195704	-	676	649	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1297	KGI_S1_ANT01.95m.c10062448	+	418	445	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1298	KGI_S1_ANT01.95m.c10003247	+	7447	7474	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1299	KGI_S2_ANT04_2345m.c1001347	+	8040	8067	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1300	KGI_S1_ANT01.95m.c10708988	+	201	228	RNA →
env-1301	KGI_S1_ANT01.95m.c10208214	-	419	392	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1302	JGI24770J26754_10790136	-	258	231	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1303	LWAnN_GIDYKCY01DFNMC	+	24	51	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fhi-1-1	NZ_JPRK01000017.1	-	43000	42973	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Gsp-3-1	NZ_AJLT01000006.1	-	8930	8903	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1304	ARMCC.Contig_357991	+	153	180	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fsp-6-1	NZ_AKJZ01000008.1	+	64241	64268	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1305	JGI24770J26754_10441296	+	303	330	RNA →
env-1306	JGI25920J50251_10022691	+	1368	1395	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Gsp-5-1	NZ_KE384218.1	-	1128381	1128354	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fsp-11-1	NZ_AUEU01000005.1	-	10099	10072	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Fsp-1-1	NZ_JQMS01000001.1	+	3749524	3749551	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1307	KVRMV2_102036113	-	475	448	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Psp-3-1	NC_020830.1	+	933043	933070	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1308	CEOF01395880.1	-	44	17	RNA →
env-1309	SI60aug11_200m.c1101747	-	140	113	RNA → hypo →

env-1310	P_1C_Liq_1_UnCty_1069070	+	219	246	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Gme-1-1	NZ_AUHD01000012.1	-	8795	8768	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1311	KVRMV2_102150733	+	448	475	RNA →	
env-1312	ElkS_mat_CD2A_1245275	-	90	63	RNA →	←hypo
env-1313	JGI11876J14442_10000066	-	15974	15947	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1314	JGI25317J35169_1088507	-	268	241	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1315	JGI25321J39296_1089961	+	165	192	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1316	JGI25321J50212_10001726	-	4881	4854	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Min-1-1	NZ_BAEX01000008.1	-	31090	31063	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1317	CEVI01222985.1	+	1040	1067	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1318	JGI11876J14442_10220788	+	165	192	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1319	ElkS_mat_MD6A_1191826	+	14	41	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1320	CENM01024442.1	-	460	433	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ssp-1-1	NZ_JQNQ01000001.1	-	3054097	3054070	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1321	3300001605_10299261	+	678	705	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fsu-2-1	NZ_AUCZ01000004.1	-	149796	149769	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → hypo → monomer_idh (TIGR00178)IDH (pfam03971) →
Fsu-2-2	NZ_JRLW01000001.1	-	149690	149663	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → hypo → monomer_idh (TIGR00178)IDH (pfam03971) →
env-1322	PBR_1002168	+	6973	7000	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1323	ElkS_mat_CD2A_1001393	-	6905	6878	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1324	ElkS_mat_CD2A_1002187	-	557	530	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1325	JGI11876J14442_10004185	-	6445	6418	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1326	CENR01035721.1	+	297	324	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1327	2200738958	-	695	668	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Mze-2-1	NZ_AFOE01000017.1	-	24032	24005	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1328	P_2C_Liq_1_UnCty_1043821	-	45	18	RNA →	
Myu-1-1	NZ_JPFK01000002.1	+	125744	125771	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Gsa-1-1	NZ_AUDV01000007.1	-	8102	8075	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Amu-1-1	NZ_AUML01000029.1	+	59901	59928	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fen-1-1	NZ_AVCS01000013.1	+	115329	115356	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fen-1-2	NZ_JRLZ01000009.1	-	140934	140907	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fli-1-1	NZ_AVGG01000005.1	+	168606	168633	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fca-1-1	NZ_AVBI01000004.1	+	53904	53931	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fca-1-2	NZ_JRLU01000011.1	-	41550	41523	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fsa-1-1	NZ_AVFO01000024.1	-	41542	41515	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fse-1-1	NZ_JNCA01000006.1	-	95236	95209	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fda-1-1	NZ_AUDK01000004.1	-	79117	79090	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Dsp-2-1	NZ_CM001837.1	-	2216219	2216192	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1329	P_1C_Liq_1_UnCty_1060928	+	197	224	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1330	P_2C_Liq_1_UnCty_1114980	-	96	69	RNA →	hypo →
env-1331	P_2C_Liq_2_UnCty_1069521	-	266	239	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1332	JGI26524J50256_1000640	+	40528	40555	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1333	JGI26523J50269_1000212	+	2723	2696	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1334	JGI26534J51046_1001256	+	19707	19734	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1335	NCBI_READ_1112777305773	-	253	226	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1336	PBR_1158914	+	213	240	RNA →	
env-1337	JGI24768J34885_10254432	+	396	423	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1338	JGI25913J50563_1000388	+	6034	6007	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Faq-1-1	NZ_JRHH01000003.1	-	440802	440775	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1339	CEUK01343367.1	-	1065	1038	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1340	JGI24770J26754_10099893	+	564	591	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1341	JGI25910J50241_10080562	+	57	84	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1342	CESF01139250.1	-	371	344	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →

Zam-1-1	NZ_AYXY01000014.1	-	3873	3846	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Gec-1-1	NZ_AUHG01000016.1	-	9590	9563	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1343	CEOS01230303.1	-	1375	1348	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1344	2227004913	+	161	197	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1345	IMNBL1_c0000763	-	5212	5176	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1346	JGI996J12353_1000635	-	5278	5242	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1347	TB03JUN2009E_Contig_140630	-	66	39	RNA →
env-1348	JGI24770J26754_10070249	+	144	171	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1349	JGI24025J20009_10007707	-	2829	2802	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1350	JGI24724J26744_10044739	-	1715	1688	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1351	TB_GS09_5_10015365	-	2511	2484	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1352	KGL_S1_ANT01_95m_c10107932	+	100	127	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1353	SA_S1_NOR08_45m_c10041987	+	169	196	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1354	KGL_S2_ANT04_2345m_c1369759	-	184	157	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1355	KGL_S2_ANT05_2345m_c1099771	+	146	173	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1356	KGL_S1_ANT02_95m_c10047434	-	1222	1195	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1357	SA_S1_NOR05_45m_c10449740	-	163	136	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1358	SA_S2_NOR15_50m_c10770364	+	118	145	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1359	JGI20156J14371_10179980	+	85	112	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1360	TDF_MC_ARG01_113m_c1038862	-	280	253	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1361	CESO01105902.1	+	2141	2168	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-1362	CETY01197370.1	+	892	919	murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) → RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1363	CEVX01010802.1	+	2158	2185	RNA →
env-1364	DelMOWin2010_c10186470	+	427	454	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1365	CEWO01359685.1	+	828	855	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1366	DelMOSum2010_c10245447	-	220	193	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1367	JCVL_SCAF_1101668030402	+	742	769	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1368	JCVL_SCAF_1096627111654	+	201	228	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1369	SA_S1_NOR08_45m_c10116776	-	500	473	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1370	CENP01239202.1	-	14739	14712	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1371	CENX01155294.1	-	392	365	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1372	CEOF01367002.1	-	392	365	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1373	CEOK01333021.1	+	503	530	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Jma-1-1	NZ_JH651379.1	-	2994278	2994251	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1374	SRS043422_LANL_scaffold_17386	-	316	289	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1375	SRS015947_WUGC_scaffold_22634	+	8860	8887	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1376	SRS055450_LANL_scaffold_26813	-	98	71	RNA →
Csp-1-1	NZ_ABZV01000006.1	-	117415	117388	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1377	KGL_S1_ANT01_95m_c10119168	-	553	526	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1378	KGL_S2_ANT04_2345m_c1039681	-	468	441	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1379	KGL_S1_ANT02_95m_c10037526	+	1078	1105	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1380	KVRMV2_100600626	+	510	537	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1381	KGL_S2_ANT05_2345m_c1283145	+	206	179	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1382	KGL_S1_ANT01_95m_c10241621	-	446	419	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1383	SRS015440_WUGC_scaffold_57079	-	459	432	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1384	SRS043018_WUGC_scaffold_66496	+	2705	2732	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1385	Buccal_mucosa_LANL_C64861354	+	291	318	RNA →
env-1386	SRS015470_WUGC_scaffold_44437	+	4765	4792	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1387	SRS015803_WUGC_scaffold_24800	-	3059	3032	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1388	SRS018157_Baylor_scaffold_69033	-	304	277	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1389	SRS019077_WUGC_scaffold_14658	-	3232	3205	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-1390	SRS045197_C3591711	+	1253	1280	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1391	SRS047113_LANL_scaffold_83219	+	1884	1911	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1392	SRS053584_LANL_scaffold_18794	+	28521	28548	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1393	SRS049318_LANL_scaffold_16971	+	18008	18035	RNA → ← MnmE (COG0486) trmE (PRK05291)
env-1394	SRS053917_LANL_scaffold_21642	-	195	168	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1395	SRS016541_C1605707	+	1495	1522	RNA →
env-1396	SRS064329_C2650028	-	160	133	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1397	SRS013705_Baylor_scaffold_103146	+	2218	2245	RNA →
env-1398	SRS014691_C2508076	+	212	239	RNA →
env-1399	SRS015899_WUGC_scaffold_20745	-	1016	989	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → DEDDh (cd06127) EXOIII (smart00479) →
env-1400	SRS016600_C792137	+	109	136	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1401	SRS018300_Baylor_scaffold_9343	-	19627	19600	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → DEDDh (cd06127) GIY-YIG_UvrC_Cho (cd10434) GIYc (smart00465) EXOIII (smart00479) → hypo →
env-1402	SRS018394_Baylor_scaffold_38060	+	100	127	RNA → DEDDh (cd06127) GIY-YIG_UvrC_Cho (cd10434) GIYc (smart00465) EXOIII (smart00479) →
env-1403	SRS019077_WUGC_scaffold_36089	+	316	343	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1404	SRS019591_WUGC_scaffold_29923	+	8636	8663	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → DEDDh (cd06127) GIY-YIG_UvrC_Cho (cd10434) GIYc (smart00465) EXOIII (smart00479) → hypo →
env-1405	SRS020226_Baylor_scaffold_9915	-	98	71	RNA →
env-1406	SRS045197_WUGC_scaffold_16333	+	97	124	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1407	SRS045715_LANL_scaffold_96337	-	197	170	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1408	SRS047634_LANL_scaffold_48423	+	258	285	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → DEDDh (cd06127) GIY-YIG_UvrC_Cho (cd10434) GIYc (smart00465) EXOIII (smart00479) →
env-1409	SRS049389_C4597964	+	336	363	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1410	SRS051378_C1803515	+	93	120	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1411	SRS052876_LANL_scaffold_22433	-	95	68	RNA →
env-1412	SRS054430_C1931853	-	145	118	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1413	SRS063215_LANL_scaffold_23111	+	338	365	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → DEDDh (cd06127) GIY-YIG_UvrC_Cho (cd10434) GIYc (smart00465) EXOIII (smart00479) → hypo →
Csp-5-1	NZ_KN390023.1	+	11801	11828	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → DEDDh (cd06127) GIY-YIG_UvrC_Cho (cd10434) GIYc (smart00465) EXOIII (smart00479) → hypo →
env-1414	SRS014888_C3105885	+	94	121	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1415	SRS014894_WUGC_scaffold_7097	-	2195	2168	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1416	SRS015755_WUGC_scaffold_30815	+	386	413	RNA →
env-1417	SRS015989_WUGC_scaffold_19659	-	95	68	RNA →
env-1418	SRS016575_Baylor_scaffold_9392	-	196	169	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1419	SRS015762_C3674485	-	8573	8546	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → DEDDh (cd06127) GIY-YIG_UvrC_Cho (cd10434) GIYc (smart00465) EXOIII (smart00479) → hypo →
env-1420	SRS019122_C5792698	+	337	364	RNA →
env-1421	SRS019127_C1676711	+	5492	5519	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1422	SRS057205_LANL_scaffold_59131	-	8746	8719	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → DEDDh (cd06127) GIY-YIG_UvrC_Cho (cd10434) GIYc (smart00465) EXOIII (smart00479) → hypo →
env-1423	SRS020862_C943009	-	41	14	RNA →
env-1424	SRS023358_LANL_scaffold_6552	+	284	311	RNA →
Csp-3-1	NZ_KB291508.1	-	173545	173518	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → DEDDh (cd06127) GIY-YIG_UvrC_Cho (cd10434) GIYc (smart00465) EXOIII (smart00479) → hypo →
env-1425	SRS050244_LANL_scaffold_96048	-	316	289	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
env-1426	SRS058336_C2049026	+	171	198	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →
Csp-7-1	NZ_AKFR01000031.1	-	313220	313193	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → DEDDh (cd06127) GIY-YIG_UvrC_Cho (cd10434) EXOIII (smart00479) → hypo →
env-1427	SRS023930_C2193178	+	1147	1174	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → DEDDh (cd06127) GIY-YIG_UvrC_Cho (cd10434) GIYc (smart00465) EXOIII (smart00479) →
env-1428	SRS013723_Baylor_scaffold_18285	-	2329	2302	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) → DEDDh (cd06127) GIY-YIG_UvrC_Cho (cd10434) GIYc (smart00465) EXOIII (smart00479) → hypo →
env-1429	SRS014888_C3086477	+	650	677	RNA → rplS (PRK05338) Ribosomal_L19 (pfam01245) →

env-1430	SRS050669_LANL_scaffold.18681	+	4293	4320	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)GIYc (smart00465)EXOIII (smart00479)→ hypo→
env-1431	SRS016200_C2186320	+	683	710	RNA→
env-1432	SRS019128_WUGC_scaffold.9518	-	98	71	RNA→
env-1433	SRS022536_LANL_scaffold.19907	+	4308	4335	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→
env-1434	SRS047265_WUGC_scaffold.12298	+	1403	1430	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Coc-3-1	NZ_GL573160.1	+	1092618	1092645	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→
Coc-4-1	NZ_AKFV01000020.1	-	85462	85435	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→
env-1435	SRS015064_C1629213	-	175	148	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1436	SRS015985_C1503945	-	334	307	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1437	SRS023841_Baylor_scaffold.1736	+	704	731	RNA→
env-1438	SRS011098_Baylor_scaffold.6943	-	17288	17261	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1439	SRS013836_C4761312	+	346	373	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1440	SRS013949_WUGC_scaffold.10235	-	196	169	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1441	SRS013950_WUGC_scaffold.18124	-	73	46	RNA→
env-1442	SRS015278_WUGC_scaffold.6560	+	2113	2140	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1443	SRS015899_WUGC_scaffold.28433	-	886	859	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1444	SRS019073_C2522155	-	95	68	RNA→
env-1445	SRS019077_WUGC_scaffold.58916	-	190	163	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1446	SRS019225_WUGC_scaffold.9244	-	22742	22715	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1447	SRS024289_LANL_scaffold.9371	-	98	71	RNA→
Csp-4-1	NZ_KB291464.1	-	78968	78941	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1448	SRS011243_Baylor_scaffold.38886	-	160	133	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1449	SRS013723_Baylor_scaffold.75255	-	295	268	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1450	SRS015215_WUGC_scaffold.9005	-	288	261	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1451	SRS015797_WUGC_scaffold.26726	+	97	124	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1452	SRS016037_WUGC_scaffold.44282	+	97	124	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1453	SRS019127_WUGC_scaffold.18778	-	8687	8660	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1454	SRS023926_Baylor_scaffold.61121	-	10271	10244	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1455	SRS016092_WUGC_scaffold.23364	+	5266	5293	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1456	SRS013950_C2181950	-	72	45	RNA→
env-1457	SRS017304_Baylor_scaffold.31444	-	97	70	RNA→
env-1458	SRS055378_LANL_scaffold.18208	-	294	267	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Coc-2-1	NZ_JVFB01000050.1	+	35837	35864	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)GIYc (smart00465)EXOIII (smart00479)→ hypo→
Coc-1-1	NC_013162.1	+	98683	98710	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)EXOIII (smart00479)→ hypo→
env-1459	SRS022602_Baylor_scaffold.10139	-	838	811	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)EXOIII (smart00479)→
env-1460	SRS019129_C1939915	+	361	388	RNA→
env-1461	SRS019225_C1595905	+	1474	1501	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1462	SRS022530_LANL_scaffold.63608	-	33016	32989	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1463	SRS063288_LANL_scaffold.25513	+	95	122	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1464	SRS023595_Baylor_scaffold.90932	+	332	359	RNA→
env-1465	SRS063215_C2182525	+	130	157	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1466	SRS015540_C1108360	+	184	211	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1467	SRS011098_Baylor_scaffold.10766	+	140	167	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1468	SRS013836_Baylor_scaffold.6509	-	524	497	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Csp-9-1	NZ_KB291222.1	+	54393	54420	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)GIYc (smart00465)EXOIII (smart00479)→ hypo→
env-1469	SRS015989_WUGC_scaffold.4470	+	307	334	RNA→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)GIYc (smart00465)EXOIII (smart00479)→ hypo→

env-1470	SRS018145_Baylor_scaffold_33633	+	64	91	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1471	SRS057692_LANL_scaffold_49475	+	78	105	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1472	SRS021960_C2154761	+	379	406	RNA→	
env-1473	SRS024441_LANL_scaffold_52434	+	78	105	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1474	SRS050628_C1898890	-	986	959	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)EXOIII (smart00479)→
Csp-8-1	NZ_KE150490.1	-	376575	376548	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Csp-10-1	NZ_AJZR01000006.1	+	50848	50875	RNA→	DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)GIYc (smart00465)EXOIII (smart00479)→ hypo→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)GIYc (smart00465)EXOIII (smart00479)→ DEDDh (cd06127)GIY-YIG_UvrC_Cho (cd10434)GIYc (smart00465)EXOIII (smart00479)→ hypo→ hypo→
env-1475	Buccal_mucosa_LANL_scaffold_29579	+	329	356	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1476	SRS020222_C1009936	+	264	291	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1477	SRS014578_WUGC_scaffold_11003	-	214	187	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1478	SRS016043_WUGC_scaffold_8966	-	256	229	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1479	SRS018573_WUGC_scaffold_5605	-	2301	2274	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1480	SRS019591_WUGC_scaffold_18990	+	16688	16715	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1481	SRS020340_Baylor_scaffold_33924	-	288	261	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1482	SRS021477_Baylor_scaffold_1231	+	5953	5980	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1483	SRS023358_LANL_scaffold_44043	+	179	206	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1484	SRS024021_Baylor_scaffold_8187	-	288	261	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1485	SRS047100_C2080290	-	301	274	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fan-1-1	NZ_ATT01000004.1	+	10713	10740	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fte-1-1	NZ_AUDN01000020.1	-	101805	101778	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1486	SRS017227_Baylor_scaffold_48001	-	401	374	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1487	SRS055401_LANL_scaffold_34300	-	163	136	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1488	SRS013949_C3524448	+	60	87	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1489	SRS063932_LANL_scaffold_105541	+	28523	28550	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→ COG4389 (COG4389)SpecificRecomb (pfam10136)→
env-1490	CEOS01042827.1	-	20258	20231	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1491	CERQ01126197.1	+	4556	4583	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1492	CETA01045631.1	-	13014	12987	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1493	CETB01056197.1	+	21881	21908	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1494	CETG01362727.1	-	665	638	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1495	CETR01036094.1	+	21881	21908	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1496	CETS01044312.1	+	9368	9395	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1497	CETT01258458.1	-	563	536	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1498	CEUY01396649.1	+	431	458	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1499	CEVJ01196187.1	-	671	644	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1500	CEVK01214642.1	-	308	281	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1501	CEVM01174021.1	+	444	471	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1502	CEVO01132965.1	-	263	236	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1503	CEVQ01096279.1	-	594	567	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1504	CEWI01238921.1	-	396	369	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1505	CENM01019596.1	-	258	231	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1506	JGI24723J26617_10000093	+	49411	49438	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1507	LGVF01495366.1	+	36	63	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Mmo-1-1	NZ_AUHX01000001.1	-	133740	133713	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1508	CEOS01168860.1	+	192	219	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1509	CEQE01154469.1	+	4	31	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1510	CEVM01223312.1	-	386	359	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1511	CEVF01118313.1	-	339	312	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1512	TahiMoana_1030440	-	764	737	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1513	JGI11881J13070_1029301	+	172	199	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1514	JGI12218J13221_1034272	-	80	53	RNA→	

env-1515	JGI11931J13222_1024356	-	246	219	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1516	CETA01220460.1	+	285	312	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1517	CETS01220756.1	+	255	282	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1518	CEVIO1118676.1	-	855	828	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Lsp-4-1	NZ_JPOL01000003.1	+	201753	201780	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1519	JGI1221J11331_1178417	+	266	293	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1520	SA_S1_NOR08_45m_c10151176	-	451	424	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1521	SA_S1_NOR08_45m_c10000441	+	12622	12649	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1522	SA_S2_NOR15_50m_c10000385	+	13396	13423	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1523	SA_S1_NOR02_45m_c1172796	-	185	158	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1524	SA_S2_NOR18_50m_1098208	+	227	254	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1525	SA_S1_NOR05_45m_c10040916	-	1024	997	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ama-1-1	NZ_JACA01000020.1	+	179901	179928	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1526	JGI25920J50251_10000870	-	9504	9477	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1527	JGI25909J50240_1100786	+	75	102	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1528	JGI25911J50253_10030107	+	69	96	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1529	JGI25912J50252_10144474	+	133	160	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1530	JGI25908J49247_10036170	-	1268	1241	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1531	JGI25907J50239_1087629	+	148	175	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Aca-1-1	NZ_AUBG01000016.1	+	27656	27683	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1532	CETR01021789.1	-	7980	7953	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1533	JGI24723J26617_10120000	+	312	339	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1534	JGI24724J26744_10003103	-	7169	7142	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fsa-2-1	NZ_JMLU01000004.1	+	158055	158082	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1535	3300001592_10082624	-	375	348	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1536	3300001605_10000472	-	597	570	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1537	3300001592_10006511	+	11374	11401	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fba-2-1	NZ_AAXX01000003.1	-	173796	173769	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Kje-1-1	NZ_LBMG01000057.1	+	26887	26914	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Kal-1-1	NZ_DS544873.1	+	1877186	1877213	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Kzh-1-1	NZ_LBMH01000008.1	-	5300	5273	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1538	TB_FS06_10DRAFT_1000005	+	81339	81366	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1539	JGI20151J14362_10264229	-	319	292	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1540	JGI20156J14371_10338308	-	271	244	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1541	JGI25920J50251_10088380	+	139	166	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fin-1-1	NC_017025.1	-	992421	992394	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1542	CESJ01019018.1	-	182	155	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1543	CEWG01277609.1	-	481	454	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1544	CESM01468209.1	-	344	317	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1545	2236876007_0430719	+	198	225	RNA →	hypo →
env-1546	CETY01043148.1	-	6005	5978	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → Peptidase_M14NE-CP-C like (cd11308)CirA (COG1629)TonB-hemlactrns (TIGR01786)CarbopepD_reg_2 (pfam13715) → DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) →
env-1547	DelMOSum2010_c10221712	+	321	348	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1548	CEWO01314910.1	+	580	607	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1549	JGI20156J14371_10001449	+	17641	17668	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-1550	JGI20155J14468_10020639	-	210	183	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1551	JGI20160J14292_10134963	-	298	271	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1552	CERIO1264885.1	+	831	858	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1553	CERM01228874.1	+	1239	1266	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1554	JGI20156J14371_10182376	-	65	38	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1555	2236876001_539343	+	237	264	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1556	CESU01013805.1	+	6882	6909	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-1557	CESI01075687.1	-	1194	1167	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1558	CEVG01321748.1	+	522	549	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1559	A09P04_1300_Sequence0000000262	+	5688	5715	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1560	A09P041000a_Sequence0000000037	-	206	179	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1561	CENF01216542.1	+	866	893	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064)TonB_dep_Rec (pfam00593)Plug (pfam07715)CarbopepD_reg_2 (pfam13715)OMP_b-brl_3 (pfam13715) →
env-1562	CETV01076215.1	+	63	90	DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) → RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)thrS (PRK00413) →
env-1563	JCVL_SCAF_1096627109417	+	201	228	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-1564	SI60aug11_100m.c1000185	+	69	96	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-1565	CESI01023758.1	-	17726	17699	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → CirA (COG1629)TonB-hemlactrns (TIGR01786)CarbopepD_reg_2 (pfam13715) → DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1566	CESU01036743.1	+	15859	15886	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1567	CERR01132098.1	+	302	329	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1568	CEVX01177957.1	+	418	445	RNA → ←hypo
env-1569	SI47jul10_100m.c1001824	-	4900	4873	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-1570	SI54feb11_100m.c1021428	-	825	798	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1571	SI36aug09_135m.c1033193	+	185	212	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1572	SI47jul10_120m.c1035424	-	591	564	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1573	SI34jun09_120m_1000013	+	68976	69003	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-1574	SI34jun09_135m_1000008	-	90123	90096	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-1575	SI36aug09_100m_1005555	-	1309	1282	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1576	SI36aug09_120m_1000042	+	41474	41501	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-1577	SI36aug09_120m_1006408	+	625	598	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1578	SI34jun09_100m_1013853	-	1182	1209	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1579	F10SI03120a_Sequence0000008470	-	1292	1265	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1580	F10SI03135a_Sequence0000028256	-	1234	1207	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1581	CESE01030659.1	+	2760	2787	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1582	CEWR01159442.1	+	4928	4955	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1583	CEOP01456443.1	-	1734	1707	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-1584	CERW011247538.1	-	744	717	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1585	CEVX01084310.1	+	8526	8553	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064)Plug (pfam07715)CarbopepD_reg_2 (pfam13715) →
env-1586	CEWO01028333.1	+	4814	4841	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064)Plug (pfam07715)CarbopepD_reg_2 (pfam13715) →
env-1587	CETQ01273970.1	-	129	102	RNA → hypo →
env-1588	CETK01030187.1	+	60	87	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → CarbopepD_reg_2 (pfam13715) →
env-1589	CETA01078260.1	+	1931	1958	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1590	CESM01008740.1	+	6469	6496	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1591	CEUA01047049.1	-	77	50	RNA →
env-1592	CEUB01108690.1	-	4211	4184	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → TonB-hemin (TIGR01785)TonB_dep_Rec (pfam00593)Plug (pfam07715)CarbopepD_reg_2 (pfam13715) → hypo →
env-1593	CENZ01369401.1	-	254	227	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1594	CEQF01051053.1	+	1217	1244	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1595	CERL01234262.1	+	134	161	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1596	CEQY01193862.1	-	1759	1732	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-1597	CERR01235002.1	+	163	190	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1598	CESQ01389779.1	+	211	238	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1599	CETI01152875.1	+	187	214	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
Mth-1-1	NZ_LDAS01000001.1	-	695657	695630	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1600	JGI24723J26617_10397431	+	150	177	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-1601	JGI24724J26744.10000071	-	8106	8079	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1602	BS_KBA_SWE12.21m.c10564765	+	114	141	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1603	BS_KBA_SWE02.21m.10243122	-	247	220	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Bar-1-1	NZ_AFXZ01000061.1	-	9495	9468	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1604	CESI01155152.1	-	1312	1285	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1605	JCVI_SCAF_1096627904983	+	1367	1394	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1606	JGI20152J14361.10239717	+	202	229	RNA →
env-1607	CESI01144570.1	+	19660	19687	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1608	JGI20156J14371.10001677	+	8441	8468	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS (cd04795) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1609	JGI20160J14292.10002169	+	6253	6280	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1610	JGI20159J14440.10295666	+	144	171	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1611	CERI01069492.1	+	3368	3395	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1612	CESI01307738.1	-	4623	4596	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1613	CESU01111611.1	+	322	349	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1614	DelMO_Sum2010.c10000810	-	24769	24742	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1615	JGI20160J14292.10000029	+	74902	74929	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1616	NCBI_BBAY_READ_1105898016080	-	698	671	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1617	KGI_S1_ANT03.95m.c1092068	+	85	112	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1618	CENF01157472.1	+	115	142	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1619	CEOM01030827.1	-	7675	7648	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-1620	CERW01220270.1	+	272	299	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1621	CESP01276117.1	-	1053	1026	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1622	CEVP01353816.1	-	945	918	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1623	CEVS01278067.1	-	151	124	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1624	TB_GS09.5.10001116	+	8952	8979	RNA → ← hypo →
env-1625	LGVF01492896.1	-	734	707	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1626	LGVC01057912.1	-	723	696	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1627	LGVF01075961.1	-	4858	4831	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1628	LGVD01061935.1	+	3177	3204	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1629	JGI24023J19991.10018257	-	2685	2658	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1630	SA_S1_NOR08.45m.c10644258	+	115	142	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1631	BS_KBA_SWE12.21m.c10053575	-	952	925	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1632	BS_KBA_SWE12.21m.c10014505	-	2364	2337	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1633	BS_KBA_SWE21.205m.10014880	-	290	263	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1634	BS_KBA_SWE02.21m.10009640	-	1361	1334	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1635	BS_KBA_SWE12.21m.c10000793	+	3415	3442	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1636	BS_KBB_SWE26.205m.c1001614	-	974	947	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1637	BS_KBA_SWE07.21m.c1003990	-	996	969	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1638	BS_KBA_SWE21.205m.10000010	+	4468	4495	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1639	BS_KBA_SWE02.21m.10000410	-	12530	12503	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1640	SA_S1_NOR05.45m.c10006399	-	2424	2397	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1641	SA_S1_NOR08.45m.c10019755	-	2638	2611	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1642	SA_S2_NOR15.50m.c10428401	-	127	100	RNA → hypo →
env-1643	SA_S1_NOR02.45m.c1030347	-	406	379	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1644	SA_S1_NOR05.45m.c10357957	+	172	199	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1645	SA_S1_NOR08.45m.c10002181	-	7235	7208	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1646	SA_S2_NOR15.50m.c10098518	+	631	658	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-1647	SA_S1_NOR02_45m.c1091868	+	275	302	RNA→
env-1648	SA_S1_NOR08_45m.c10420270	+	193	220	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1649	SA_S2_NOR15_50m.c10316835	-	257	230	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1650	TDF_OR_ARG04_113m.c1012125	+	552	579	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1651	TDF_MC_ARG01_113m.c1022147	+	240	267	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1652	TDF_MC_ARG02_113m.c1008450	-	506	479	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1653	BS_KBA_SWE02_21m.10037748	-	1195	1168	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1654	3300000558_10149016	-	188	161	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1655	3300001580_10557157	-	129	102	RNA→ hypo→
env-1656	JGI24025J20009_10008154	+	4607	4634	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1657	JGI24023J19991_10004490	+	7709	7736	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1658	JGI24023J19991_10080503	-	958	931	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1659	JGI24723J26617_10180956	+	346	373	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1660	KGL_S1_ANT01_95m.c10580845	+	177	204	RNA→
env-1661	SA_S1_NOR05_45m.c10210261	-	309	282	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1662	SA_S1_NOR08_45m.c10537755	-	218	191	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1663	BS_KBA_SWE02_21m.10201411	-	197	170	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1664	JGI24023J19991_10000890	+	13567	13594	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1665	JGI24023J19991_10066851	-	58	31	RNA→
env-1666	JGI24723J26617_10016062	-	2589	2562	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1667	SA_S2_NOR13_50m.c1002773	+	505	532	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1668	SA_S1_NOR08_45m.c10050681	-	1008	981	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1669	SA_S2_NOR18_50m.1016505	+	743	770	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1670	BS_KBA_SWE12_21m.c10023034	+	75	102	RNA→ hypo→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1671	TDF_MC_ARG01_113m.c1073913	-	277	250	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1672	SA_S1_NOR05_45m.c10164455	-	247	220	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1673	SA_S1_NOR08_45m.c10222535	+	399	426	RNA→ hypo→
env-1674	KGI_S2_ANT04_2345m.c1080213	-	311	284	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1675	KGI_S2_ANT05_2345m.c1048372	+	258	285	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1676	KGL_S1_ANT02_95m.c10148848	+	250	277	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1677	SA_S1_NOR05_45m.c10033322	-	654	627	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1678	SA_S2_NOR15_50m.c10038594	-	1024	997	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1679	SA_S1_NOR02_45m.c1001276	+	495	522	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1680	DelMOSum2010.c10000022	+	68552	68579	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1681	JGI20152J14361_10000425	+	29939	29966	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1682	JGI20156J14371_10000267	-	17345	17318	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1683	JGI20160J14292_10003446	-	6169	6142	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1684	JGI20157J14317_10000008	-	112600	112573	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1685	JGI20159J14440_10247722	-	454	427	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1686	JGI20155J14468_10011132	-	1438	1411	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1687	JGI24024J18818_10003851	-	4397	4370	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1688	JGI24025J20009_10171329	-	268	241	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1689	JGI24023J19991_10009898	-	4045	4018	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1690	AMQJ01014829.1	+	152	179	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1691	BS_KBB_SWE26_205m.c1063562	-	562	535	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1692	LADL01001103.1	-	19831	19804	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1693	3300001605_10098760	+	18	45	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1694	3300001605_10728906	+	37	64	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1695	JGI25319J35699_1005705	-	2536	2509	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1696	JGI25322J35698_1044001	+	313	340	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1697	JGI25322J35698_1082485	-	304	277	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→
env-1698	JGI25321J50212_10001262	+	10258	10285	RNA→ rplS (PRK05338) Ribosomal_L19 (pfam01245)→

env-1699	JGI24023J19991_10000724	-	16241	16214	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1700	JGI24023J19991_10020737	-	942	915	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1701	JGI24724J26744_10238812	+	132	159	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1702	GYQO9XB02HASQ4	+	72	99	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1703	SA_S2_NOR13_50m_c1000423	-	7317	7290	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1704	SA_S1_NOR05_45m_c10000647	+	6814	6841	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1705	SA_S1_NOR08_45m_c10010910	+	1079	1106	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1706	SA_S2_NOR15_50m_c10000830	-	7224	7197	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1707	SA_S1_NOR02_45m_c1000223	+	5930	5957	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1708	SA_S2_NOR18_50m_1000296	+	7034	7061	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1709	SA_S1_NOR08_45m_c10776056	+	93	120	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1710	SA_S2_NOR15_50m_c10819626	+	139	166	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1711	KGI_S2_ANT04_2345m_c1093702	-	353	326	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1712	JGI24024J18818_10091357	+	178	205	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1713	JGI24023J19991_10004817	+	8687	8714	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1714	JGI24724J26744_10028319	+	646	673	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1715	JGI25321J39296_1005427	-	539	512	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1716	KGI_S1_ANT01_95m_c10099108	-	675	648	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1717	JGI20152J14361_10116815	-	44	17	RNA	→		
env-1718	CESJ01024341.1	-	209	182	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1719	CESU01225158.1	-	101	74	RNA	→	←hypo	
env-1720	2236876010_0042617	-	400	373	RNA	→	←hypo	
env-1721	CESE01142542.1	-	615	588	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1722	CEST01023914.1	+	29031	29058	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1723	SI47jul10_100m_c1098063	+	194	221	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1724	SI60aug11_100m_c1028962	+	97	124	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1725	SI34jun09_10m_1003941	-	2294	2267	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1726	SI34jun09_120m_1016406	+	1739	1766	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1727	SI34jun09_135m_1017351	+	105	132	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1728	SI34jun09_100m_1011215	+	2334	2361	RNA	→	←hypo	
env-1729	JGI20152J14361_10052984	-	284	257	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1730	JGI20154J14316_10033520	-	1618	1591	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1731	JGI20153J14295_10031874	+	864	891	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1732	JGI20153J14318_10031874	+	864	891	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1733	SI34jun09_100m_1117558	-	60	33	RNA	→		
env-1734	JGI20154J14316_10134296	-	50	23	RNA	→	←hypo	
env-1735	A09P04500a_Sequence0000006337	-	1219	1192	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1736	2236876010_0103866	-	296	269	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1737	2236876010_0516017	-	121	94	RNA	→	hypo→	
env-1738	SI48aug10_10m_c1005499	-	1214	1187	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1739	SI34jun09_100m_1006670	-	3438	3411	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1740	SI48aug10_100m_1215338	-	233	206	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1741	JGI20152J14361_10035731	-	36	9	RNA	→		
env-1742	JGI20154J14316_10050212	+	864	891	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1743	DeMOSum2010_c10404944	+	225	252	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1744	JGI20152J14361_10057660	+	53	80	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1745	JGI20160J14292_10015472	-	917	890	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1746	JGI20153J14295_10017977	-	917	890	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1747	JGI20153J14318_10017977	-	917	890	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1748	CESI01016430.1	-	9287	9260	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1749	CESU01088699.1	-	907	880	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1750	JGI20160J14292_10015444	-	915	888	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→

env-1751	JGI20152J14361_10058556	-	907	880	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1752	JGI20151J14362_10017387	-	622	595	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1753	JGI20156J14371_10018698	-	1553	1526	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1754	JGI20153J14295_10043016	-	915	888	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1755	JGI20153J14318_10043016	-	915	888	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1756	JGI20157J14317_10051617	-	1574	1547	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1757	JGI20155J14468_10700974	-	81	54	RNA →
env-1758	SA_S1_NOR05_45m_c10078427	-	539	512	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1759	SA_S1_NOR08_45m_c10045004	+	838	865	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1760	KGI_S2_ANT05_2345m_c1126697	+	69	96	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1761	DelMOWin2010_c10293423	-	119	92	RNA → hypo →
env-1762	SA_S1_NOR05_45m_c10023438	+	31	58	RNA → hypo → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1763	SA_S2_NOR15_50m_c10177335	+	332	359	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1764	wf3_Contig6924	+	1855	1882	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1765	SA_S2_NOR13_50m_c1013867	+	488	515	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1766	SA_S1_NOR05_45m_c10010432	-	1796	1769	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1767	SA_S1_NOR08_45m_c10037082	-	634	607	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1768	SA_S2_NOR15_50m_c10017076	-	2062	2035	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1769	SA_S2_NOR15_50m_c10038947	+	1097	1124	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1770	SA_S2_NOR18_50m_1060527	-	230	203	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1771	SA_S1_NOR05_45m_c10402627	+	248	275	RNA →
env-1772	SA_S1_NOR05_45m_c10000045	-	1209	1182	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1773	SA_S1_NOR08_45m_c10003536	-	7347	7320	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1774	SA_S1_NOR08_45m_c10000343	-	1310	1283	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1775	SA_S2_NOR15_50m_c10001574	+	6336	6363	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1776	SA_S1_NOR02_45m_c1000618	-	359	332	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1777	JGI20153J14295_10002993	+	9139	9166	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → hypo →
env-1778	JGI20153J14318_10002993	+	9139	9166	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → hypo →
env-1779	TDF_OR_ARG04_113m_c1085059	+	254	281	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1780	TDF_MC_ARG01_113m_c1019942	+	199	226	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1781	SA_S1_NOR08_45m_c10002903	+	2910	2937	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1782	A09P04_1300_Sequence0000007657	+	1676	1703	RNA → ←hypo
env-1783	KGI_S1_ANT01_95m_c10287783	+	183	210	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1784	KGI_S2_ANT06_2345m_c1008730	+	1837	1864	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1785	KGI_S2_ANT04_2345m_c1006171	+	550	577	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1786	KGI_S1_ANT03_95m_c1134508	-	63	36	RNA →
env-1787	JGI20157J14317_10111054	-	633	606	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1788	SA_S1_NOR08_45m_c10034502	-	1734	1707	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1789	SA_S2_NOR15_50m_c10791456	-	35	8	RNA → hypo →
env-1790	SA_S1_NOR05_45m_c10068256	-	784	757	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1791	SA_S1_NOR02_45m_c1126975	+	134	161	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1792	JGI24023J19991_10001462	-	645	618	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1793	TB_FS06_10DRAFT_1000012	-	81337	81310	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1794	CEQG01202036.1	-	389	362	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1795	CETB01163705.1	-	1198	1171	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1796	CETR01130265.1	-	4705	4678	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1797	CEVI01205692.1	-	792	765	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1798	CEVK01214383.1	+	636	663	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1799	CEVM01258184.1	+	830	857	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1800	CEVO01247352.1	+	698	725	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1801	CEVQ01122451.1	-	320926	320899	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1802	KVRMV2_102248759	-	166	139	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-1803	SA_S1_NOR05_45m.c10338159	-	197	170	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1804	TB_PC08_66_10120445	+	167	194	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1805	TB_PC08_3_1025062	-	907	880	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1806	JGI20156J14371_10038484	+	575	602	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1807	TB_FS06_10DRAFT_1028770	+	1020	1047	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1808	TB_FS08_3DRAFT_1011355	+	1346	1373	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1809	TB_GS10_10_10046912	-	1239	1212	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1810	TB_PC08_64_1001821	-	694	667	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1811	TB_GS09_5_10120216	+	181	208	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1812	SA_S2_NOR13_50m.c1168462	-	250	223	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1813	F3OLC3J02IOFD0	+	181	208	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1814	DelMOSum2010_c10132439	+	587	614	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1815	JGI20154J14316_10553810	+	41	68	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1816	Y607_1006251	+	85823	85850	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1817	P_2C_Liq_1_UnCty_1000596	-	3980	3953	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1818	P_2C_Liq_2_UnCty_1018319	-	663	636	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1819	CESM01027170.1	-	1718	1691	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1820	CESO01163408.1	-	81	54	RNA→	
env-1821	2236876010_0590763	+	140	167	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1822	CERM01240744.1	-	96	69	RNA→	
env-1823	CESO01076655.1	+	584	611	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1824	S134jun09_10m_1037670	-	665	638	RNA→	hypo→ rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1825	JCVL_SCAF_1096627114274	-	579	552	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1826	KGL_S1_ANT01_95m.c10055806	-	1138	1111	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1827	KGI_S2_ANT04_2345m.c1015516	+	2067	2094	RNA→	
env-1828	KGI_S2_ANT05_2345m.c1137445	-	257	230	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1829	KGL_S1_ANT02_95m.c10013777	-	1526	1499	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1830	SA_S2_NOR18_50m_1001412	+	399	426	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1831	JGI24723J26617_10068646	+	585	612	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1832	SA_S2_NOR13_50m.c1001448	-	4743	4716	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1833	SA_S1_NOR05_45m.c10001450	+	3917	3944	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1834	SA_S1_NOR08_45m.c10000307	+	15014	15041	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1835	SA_S2_NOR15_50m.c10010164	-	3285	3258	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1836	SA_S1_NOR02_45m.c1019106	-	530	503	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1837	SA_S1_NOR08_45m.c10000615	-	6292	6265	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1838	SA_S2_NOR15_50m.c10000097	+	10972	10999	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1839	SA_S2_NOR15_50m.c10469518	-	217	190	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1840	JGI24724J26744_11008656	+	37	64	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1841	TDF_MC_ARG01_113m.c1006717	+	93	120	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1842	SA_S1_NOR05_45m.c10106893	+	70	97	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1843	KGL_S1_ANT03_95m.c1004957	+	964	991	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1844	CESI01143241.1	-	582	555	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1845	KGL_S1_ANT01_95m.c10121130	-	48	21	RNA→	
env-1846	TDF_OR_ARG04_113m.c1009977	-	584	557	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1847	TDF_MC_ARG01_113m.c1004441	-	665	638	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1848	KGI_S2_ANT04_2345m.c1086413	+	531	558	RNA→	←hypo
env-1849	JGI24024J18818_10700231	+	18	45	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1850	JGI24723J26617_10589038	+	80	107	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1851	TDF_OR_ARG04_113m.c1145284	-	81	54	RNA→	←hypo
env-1852	TDF_MC_ARG01_113m.c1013236	-	275	248	RNA→	←hypo
env-1853	CEVE01269246.1	+	219	246	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
env-1854	CEVF01060294.1	+	1089	1116	RNA→	rplS (PRK05338)Ribosomal_L19 (pfam01245)→

Mlu-1-1	NZ_CP011071.1	+	10994	11021	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1855	2236876010_0651002	-	265	238	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1856	2236876010_0559523	+	257	284	RNA →
env-1857	JGI20154J14316_10006430	+	537	564	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1858	JGI20153J14295_10000108	-	47780	47753	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1859	JGI20153J14318_10000108	-	47780	47753	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1860	JCVL_SCAF_1096627739007	-	830	803	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1861	CETK01280519.1	+	89	116	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
Ala-2-1	NZ_AUKX01000041.1	+	37352	37379	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1862	JGI24723J26617_10101877	-	728	701	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ndo-1-1	NC_020156.1	+	117213	117240	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1863	DelMOSum2011_c10602551	-	154	127	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1864	A09P0410a_Sequence0000028955	+	1010	1037	RNA →
Cal-1-1	NC_014934.1	+	10579	10606	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1865	2236876009_020497	+	88	115	RNA →
Csp-13-1	NZ_JUHB01000001.1	+	1008351	1008378	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Mfo-1-1	NZ_JQLH01000001.1	+	2737717	2737744	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Cba-4-1	NZ_CP009887.1	+	4088266	4088293	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Cba-2-1	NZ_CP009976.1	+	4128380	4128407	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Cba-1-1	NZ_ATLH01000022.1	+	273938	273965	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Cba-3-1	NZ_ATLG01000021.1	+	275945	275972	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Csp-12-1	NZ_JQCT01000003.1	-	7091	7064	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1866	CEQL01331727.1	-	1140	1113	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-1867	BS_KBA_SWE12_21m_c10696970	+	162	189	RNA →
env-1868	BS_KBA_SWE02_21m_10122283	+	143	170	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1869	3300001605_10642224	+	131	158	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1870	3300000558_11705956	-	186	159	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1871	3300001605_11328178	-	116	89	RNA → hypo →
env-1872	CENX01111910.1	+	8377	8404	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo →
env-1873	CENP01126039.1	+	1259	1286	RNA →
env-1874	CEOF01188357.1	-	3192	3165	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → murQ (PRK05441)SIS_Etherase (cd05007) → hypo → TGS_ThrRS_N (cd01667)ThrS (COG0441)thrS (PRK00413) →
env-1875	JGI20154J14316_10007303	-	5508	5481	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1876	JGI20160J14292_10005573	-	5508	5481	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1877	JGI20153J14295_10005409	-	5688	5661	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1878	JGI20153J14318_10005409	-	5688	5661	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1879	JGI20157J14317_10006339	-	4204	4177	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1880	KGI_S1_ANT01_95m_c10030633	+	858	885	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1881	SA_S1_NOR08_45m_c10000592	-	9103	9076	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1882	KGI_S2_ANT04_2345m_c1033268	+	162	189	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1883	SA_S2_NOR15_50m_c10000395	-	9786	9759	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1884	KGI_S2_ANT05_2345m_c1037235	+	96	123	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1885	KGI_S1_ANT02_95m_c10039728	+	412	439	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1886	JGI24023J19991_10000015	-	6676	6649	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Orh-1-1	NC_018016.1	-	563396	563369	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Orh-3-1	NZ_CP006828.1	+	1411724	1411751	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Orh-2-1	NZ_AXDE01000005.1	+	164490	164517	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1887	TB_FS06_10DRAFT_1002658	+	1277	1304	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1888	LG0V01058696.1	+	3884	3911	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1889	LGVE01220578.1	-	1243	1216	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1890	LGVF01377133.1	+	233	260	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1891	topACOD_F95O9CU01CV6MI	+	310	337	RNA → ←hypo

env-1892	SRS011243_C2014617	+	132	159	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1893	SRS013533_PGA_scaffold_14677	+	406	433	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1894	SRS014888_C3069310	-	488	461	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1895	SRS015762_C3674271	-	5976	5949	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1896	SRS019028_C2956184	+	301	328	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1897	SRS057355_C2324181	-	410	383	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1898	SRS015893_C2350217	-	265	238	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1899	SRS016575_Baylor_scaffold_56189	-	634	607	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1900	SRS015985_WUGC_scaffold_37008	+	406	433	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1901	SRS013949_WUGC_scaffold_26331	+	33	60	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1902	SRS015755_WUGC_scaffold_23418	+	50	77	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1903	SRS015989_WUGC_scaffold_7779	+	1237	1264	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1904	SRS018665_WUGC_scaffold_42984	-	394	367	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1905	SRS019077_C2600640	-	510	483	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1906	SRS019980_Baylor_scaffold_35308	-	329	302	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1907	SRS021960_Baylor_scaffold_16219	-	926	899	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1908	SRS022725_C5693545	+	21	48	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1909	SRS024144_C1769633	-	629	602	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1910	SRS024447_LANL_scaffold_57217	+	716	743	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1911	SRS042984_LANL_scaffold_57938	+	113	140	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1912	SRS043018_WUGC_scaffold_57339	-	1047	1020	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1913	SRS045197_WUGC_scaffold_67272	-	636	609	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1914	SRS047100_C2003956	+	65	92	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1915	SRS047113_LANL_scaffold_55438	+	262	289	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1916	SRS051378_C1867511	+	419	446	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1917	SRS053584_LANL_scaffold_44116	-	1012	985	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1918	SRS019387_C1763302	+	725	752	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1919	SRS022719_LANL_scaffold_27291	-	206354	206327	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1920	SRS044662_LANL_scaffold_16481	+	271	298	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1921	SRS024081_LANL_scaffold_75020	+	4020	4047	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1922	SRS043663_C4071478	+	98	125	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1923	SRS058808_LANL_scaffold_27436	-	1152	1125	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ran-1-1	NZ_CP007503.1	-	224334	224307	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1924	Throat_LANL_C5692256	-	55	28	RNA →	
env-1925	SRS013945_C1211939	-	282	255	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1926	SRS014124_WUGC_scaffold_20088	+	433	460	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1927	SRS050244_C4542361	+	282	309	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1928	SRS077736_C1862773	-	6973	6946	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1929	SRS015574_C3403721	-	626	599	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1930	SRS018394_Baylor_scaffold_2340	-	289	262	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1931	SRS020226_Baylor_scaffold_48915	+	185	212	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1932	SRS024580_C3050280	+	109	136	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ran-6-1	NC_017569.1	+	2072327	2072354	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ran-8-1	NZ_AENH01000023.1	+	154146	154173	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ran-5-1	NC_020125.1	+	1496908	1496935	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ran-1-2	NZ_CP007504.1	-	234152	234125	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ran-9-1	NZ_CP007204.1	-	224442	224415	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1933	SRS064329_C2693709	+	819	846	RNA →	
env-1934	Contig7224538.1	+	301	328	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1935	SRS011306_C3614405	+	617	644	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1936	SRS012279_C2754684	+	588	615	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1937	SRS014573_C3689455	-	453	426	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →

env-1938	SRS015434_C5917170	+	248	275	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1939	SRS015644_C1854550	+	125	152	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1940	SRS016002_WUGC_scaffold_45788	+	233	260	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1941	SRS016086_C2526098	-	7008	6981	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1942	SRS016225_C3019675	-	16261	16234	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1943	SRS017209_Baylor_scaffold_70466	-	6318	6291	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1944	SRS018157_Baylor_scaffold_33211	-	449	422	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1945	SRS018300_C3337187	+	271	298	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1946	SRS018357_C3935552	-	973	946	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1947	SRS019071_C5219198	+	750	777	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1948	SRS019327_C2809319	-	4490	4463	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1949	SRS019591_WUGC_scaffold_40451	-	587	560	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1950	SRS022077_Baylor_scaffold_57695	+	692	719	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1951	SRS022530_LANL_scaffold_35836	-	15939	15912	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1952	SRS023557_C1767643	+	685	712	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1953	SRS024015_C2912470	+	143	170	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1954	SRS024138_C2702299	+	249	276	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1955	SRS024277_C2782780	+	132	159	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1956	SRS024441_C3047628	-	532	505	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1957	SRS042131_C2195835	-	173	146	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1958	SRS042910_C5619617	-	593	566	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1959	SRS044373_C2908610	+	898	925	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1960	SRS049389_WUGC_scaffold_41106	-	1464	1437	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1961	SRS050669_LANL_scaffold_26170	-	6321	6294	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1962	SRS054687_C3492060	-	1063	1036	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1963	SRS056622_C2465234	-	126	99	RNA	→	hypo→	
env-1964	SRS057791_LANL_scaffold_38618	-	378	351	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1965	SRS058336_LANL_scaffold_49913	-	1206	1179	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1966	SRS063288_LANL_scaffold_40195	-	1268	1241	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1967	SRS064423_C2493432	+	93	120	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1968	SRS011152_Baylor_scaffold_32757	+	171	198	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1969	SRS011343_C2194933	+	209	236	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1970	SRS013170_Baylor_scaffold_51649	+	154	181	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1971	SRS015278_WUGC_scaffold_59883	+	397	424	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1972	SRS018971_C758067	-	179	206	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1973	SRS018975_WUGC_scaffold_37778	+	742	715	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1974	SRS022536_LANL_scaffold_73925	+	387	414	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1975	SRS023964_C2589681	-	1401	1374	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1976	SRS051941_C3866993	-	218	191	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1977	SRS013947_WUGC_scaffold_25354	-	1008	981	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1978	SRS023930_Baylor_scaffold_9769	-	192	165	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1979	SRS013723_C3240076	-	198	171	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1980	SRS015440_WUGC_scaffold_82221	+	2031	2058	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1981	SRS015470_WUGC_scaffold_52571	+	10203	10230	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1982	SRS016043_WUGC_scaffold_35871	-	521	494	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1983	SRS019073_C2517672	-	733	706	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1984	SRS016200_WUGC_scaffold_14444	-	1066	1039	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1985	SRS051244_C3506325	+	2611	2638	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1986	SRS055450_C2078447	-	643	616	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1987	SRS017439_C3808563	+	80	107	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1988	SRS019591_C1935122	+	1741	1768	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→
env-1989	SRS020340_Baylor_scaffold_39528	+	113	140	RNA	→	rplS (PRK05338)Ribosomal_L19 (pfam01245)	→

env-1990	SRS023595_C7179369	+	182	209	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1991	SRS042643_C2995340	+	43	70	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1992	SRS057539_C2749897	+	2475	2502	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1993	SRS014894_WUGC_scaffold_69889	-	1011	984	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ran-2-1	NC_014738.1	-	235938	235911	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ran-7-1	NZ_KB206037.1	+	651066	651093	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ran-2-2	NZ_017045.1	-	396304	396277	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Rco-1-1	NZ_KB894217.1	+	70188	70215	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Era (COG1159)era (PRK00089) → ABC_YhbG (cd03218)AAA (smart00382)BCA_ABC_TP_C (pfam12399) → PduO_Nterm (TIGR00636)Cob_adeno_trans (pfam01923) → TPK (cd07995)TPK_B1_binding (smart00983) →
env-1994	Palatine_Tonsils_LANL_C6201686	-	597	570	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1995	SRS013252_C3650314	+	625	652	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1996	SRS015158_WUGC_scaffold_8442	+	3252	3279	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1997	SRS015797_C2637654	+	603	630	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1998	SRS019906_C2274015	+	1640	1667	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-1999	SRS022149_LANL_scaffold_18048	+	563	590	RNA →
env-2000	SRS047634_LANL_scaffold_86898	+	255	282	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Ran-3-1	NZ_CP006649.1	+	63395	63422	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2001	SRS016541_C1584168	-	612	585	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2002	SRS023841_C1590187	+	410	437	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2003	SRS043422_C2629820	+	251	278	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2004	SRS053917_C3736582	+	117	144	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2005	SRS012285_Baylor_scaffold_55554	+	199	226	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2006	SRS013945_C1168989	-	161	134	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2007	SRS013950_C2108425	+	189	216	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2008	SRS014473_C1123279	+	540	567	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2009	SRS014578_WUGC_scaffold_6706	+	428	455	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2010	SRS015044_WUGC_scaffold_69863	-	685	658	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2011	SRS015899_C1768151	-	210	183	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2012	SRS016331_C4139213	-	394	367	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2013	SRS017227_Baylor_scaffold_32942	-	562	535	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2014	SRS017691_C5166596	-	303	276	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2015	SRS019125_C626092	-	1070	1043	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2016	SRS019129_WUGC_scaffold_11480	-	802	775	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2017	SRS022083_C1917930	+	717	744	RNA →
env-2018	SRS024087_C3403049	-	384	357	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2019	SRS024649_C3480943	+	159	186	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2020	SRS043755_WUGC_scaffold_2404	+	403	430	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2021	SRS047265_C1089128	+	277	304	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2022	SRS049318_C6415734	+	418	445	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2023	SRS051930_C3222104	+	135	162	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2024	SRS052876_LANL_scaffold_28233	-	514	487	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2025	SRS054430_LANL_scaffold_17686	-	3792	3765	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2026	SRS055378_C4102388	-	904	877	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2027	SRS063603_C4216775	+	204	231	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2028	SRS063932_LANL_scaffold_98887	-	303	276	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2029	SRS063999_LANL_scaffold_36577	+	83	110	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2030	SRS064449_C3931012	+	199	226	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2031	SRS075410_LANL_scaffold_45208	+	279	306	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2032	SRS021496_C2863013	+	18	45	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2033	SRS017445_Baylor_scaffold_27071	-	1986	1959	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2034	CENR01002311.1	-	10635	10608	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2035	JCVI_SCAF_1096626906398	-	1635	1608	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →

Fge-1-1	NZ_AUGN01000001.1	+	377756	377783	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Nma-1-1	NZ_AP014548.1	+	46175	46202	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2036	CENJ01235641.1	-	101	74	RNA →
env-2037	CEQC01079196.1	+	513	540	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2038	CEQG01233746.1	-	746	719	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2039	CEQH01174899.1	+	314	341	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2040	CEQR01110413.1	-	5165	5138	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2041	CEQT01267208.1	-	212	185	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2042	CEQZ01055080.1	-	2498	2471	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2043	CERB01343087.1	+	510	537	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2044	CERC01066855.1	+	170716	170743	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2045	CERD01039641.1	+	170722	170749	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2046	CERX01145001.1	+	1529	1556	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2047	JGI20157J14317_10303049	-	277	250	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2048	DelMOSum2010_c10000073	-	56849	56822	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2049	A09P0410a_Sequence0000004289	-	1199	1172	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2050	CESP01013401.1	+	29497	29523	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) → TonB_dep_Rec (pfam00593)Plug (pfam07715)CarbopepD_reg_2 (pfam13715)OMP_b-brl_3 (pfam14905) → DUF4249 (pfam14054) → murQ (PRK05441)SIS_Etherase (cd05007) →
env-2051	CEUM01057183.1	+	1335	1361	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2052	CESB01235038.1	+	467	493	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2053	CESZ01095135.1	-	719	693	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2054	CEOC01268308.1	-	738	712	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2055	CEQL01119221.1	-	829	803	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2056	CETL01074928.1	-	1402	1376	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2057	JCVL_SCAF_1096627050705	+	985	1011	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) → Peptidase_M14NE-CP-C_like (cd11308)Plug (pfam07715)CarbopepD_reg_2 (pfam13715) →
env-2058	85084776	+	656	682	RNA →
env-2059	JCVL_READ_1103180508165	+	656	682	RNA →
env-2060	CENO01049189.1	-	4161	4135	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) → Peptidase_M14NE-CP-C_like (cd11308)TonB-hemlactrns (TIGR01786)TonB_dep_Rec (pfam00593)Plug (pfam07715)Carb DUF4249 (pfam14054) →
env-2061	CENQ01101034.1	+	138	164	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2062	CEOV01119354.1	+	225	251	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2063	CEPB01008934.1	+	225	251	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2064	CEQD01038409.1	+	1170	1196	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) → Peptidase_M14NE-CP-C_like (cd11308)Plug (pfam07715)CarbopepD_reg_2 (pfam13715) →
env-2065	CETP01090435.1	-	265	239	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2066	CEUW01136624.1	+	327	353	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2067	JCVL_SCAF_1096627827830	-	1339	1315	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2068	CERK01129111.1	-	488	464	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2069	CEOY01052385.1	-	1246	1222	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2070	CEWA01020377.1	-	206	182	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2071	JCVL_SCAF_1101668434874	-	68	44	RNA →
env-2072	CEPA01251295.1	+	591	615	RNA →
env-2073	CEUM01025643.1	-	3227	3203	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → Icd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064)Plug (pfam07715)CarbopepD_reg_2 (pfam13715) →
env-2074	CEUR01331033.1	+	1016	1040	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2075	CEWJ01138850.1	+	1316	1340	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2076	CEVY01039090.1	+	1019	1043	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2077	JCVL_SCAF_1101667338675	-	229	205	RNA →
env-2078	CEQN01304455.1	+	639	663	RNA →
env-2079	CEWH01064632.1	-	607	583	RNA → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →

env-2080	JCVL_SCAF_1096627518681	-	1299	1275	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2081	JCVL_SCAF_1096628156800	+	1484	1508	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2082	JCVL_SCAF_1096626505381	-	660	636	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2083	CEOC01044408.1	-	1075	1051	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2084	CEOO01047216.1	-	229	205	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2085	CEOV01066520.1	+	633	657	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2086	CEOW01181946.1	-	83	59	RNA →	
env-2087	CEOX01007014.1	-	822	798	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2088	CEPC01000822.1	+	908	932	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2089	CEPK01174470.1	+	625	649	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2090	CEPT01287638.1	-	874	850	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2091	CEPW01050466.1	+	751	775	RNA →	
env-2092	CEQM01235848.1	+	92	116	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2093	CERW01124879.1	+	537	561	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2094	CETW01029624.1	+	2015	2039	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2095	CEVL01092845.1	+	120	144	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2096	CEVZ01428942.1	-	1474	1450	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2097	JCVI_READ_1108839666479	+	178	202	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2098	CEQO01202726.1	+	82	106	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2099	CERB01095802.1	-	746	722	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2100	CEVN01023152.1	+	744	768	RNA →	
env-2101	JCVI_READ_1103242406987	+	651	675	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → hypo →
env-2102	JCVL_SCAF_1096626678284	-	913	889	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2103	CEVR01021723.1	-	210	186	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2104	JCVL_SCAF_1096627874827	+	442	466	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2105	JCVL_SCAF_1096627874827	+	1299	1323	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2106	JCVL_SCAF_1101668523738	-	116	92	RNA →	
env-2107	JCVL_SCAF_1096628400995	-	1440	1416	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) → PRK08299 (PRK08299) → TrmD (COG0336)trmD (PRK00026) → TrmD (COG0336)trmD (PRK00026) →
env-2108	JCVL_SCAF_1096628400995	-	527	503	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2109	CEPB01125895.1	-	825	801	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2110	CETE01078549.1	-	790	766	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2111	CETH01012318.1	+	755	779	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-2112	CETM01404675.1	+	166	190	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2113	CETQ01016873.1	-	562	538	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2114	CEUF01066100.1	-	3392	3368	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064)Plug (pfam07715)CarbopepD_reg_2 (pfam13715)OMP_b-brL3 (pfam14905) → PRK10064 (PRK10064)Plug (pfam07715)CarbopepD_reg_2 (pfam13715) →
env-2115	CEUG01002262.1	+	1316	1340	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → PRK10064 (PRK10064)Plug (pfam07715)CarbopepD_reg_2 (pfam13715) →
env-2116	CEVE01132406.1	-	1971	1947	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) → Peptidase_M14NE-CP-C like (cd11308)CarbopepD_reg_2 (pfam13715) →
env-2117	CEWG01029302.1	+	660	684	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2118	JGI24820J26691_1003156	+	3260	3284	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → lcd (COG0538)PRK08299 (PRK08299) →
env-2119	JCVI_READ_1108800196652	+	341	365	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2120	JCVI_READ_1105333388420	-	189	165	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2121	CETK01326476.1	-	589	565	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) → PRK08299 (PRK08299) →
env-2122	JCVL_SCAF_1096628212569	-	1326	1302	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
env-2123	CENO01004142.1	-	481	457	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fps-4-1	NC_009613.3	-	1709481	1709454	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fps-1-1	NZ_CP008878.1	-	1965790	1965763	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fps-1-2	NZ_CP008883.1	-	1959068	1959041	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →
Fps-1-3	NZ_CP008881.1	-	1956157	1956130	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245) →

Fps-1-4	NZ_CP007627.1	+	1042967	1042994	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fps-2-1	NZ_CP007206.1	+	992155	992182	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fps-3-1	NZ_CP007207.1	+	1881558	1881585	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fps-1-5	NZ_CP008902.1	-	2002522	2002495	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fps-1-6	NZ_CP010278.1	-	2065590	2065563	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fps-1-7	NZ_CP010275.1	-	2106998	2106971	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fps-1-8	NZ_CP010276.1	-	2110820	2110793	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fps-1-9	NZ_CP010277.1	-	2068780	2068753	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Fps-1-10	NZ_CP010274.1	-	2108381	2108354	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245)→
Ran-4-1	NC_018609.1	+	1957039	1957066	RNA →	rplS (PRK05338)Ribosomal_L19 (pfam01245)→

6.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 6.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one

L19-Flavobacteria RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 6.2.

cd00635 (4) Type III Pyridoxal 5-phosphate (PLP)-Dependent Enzymes, YBL036c-like proteins.
cd00834 (35) Beta-ketoacyl-acyl carrier protein (ACP) synthase (KAS), type I and II.
cd01667 (19) TGS_ThrRS.N: ThrRS (threonyl-tRNA Synthetase) is a class II tRNA synthetase that couples threonine to its cognate tRNA.
cd02968 (7) SCO (an acronym for Synthesis of Cytochrome c Oxidase) family; composed of proteins similar to Sco1, a membrane-anchored protein possessing a soluble domain with a TRX fold.
cd03218 (1) ATP-binding cassette component of YhbG transport system.
cd04690 (18) Members of the Nudix hydrolase superfamily catalyze the hydrolysis of Nucleoside Diphosphates linked to other moieties, X.
cd04795 (1) SIS domain.
cd05007 (36) N-acetylmuramic acid 6-phosphate etherase.
cd05233 (1) classical (c) SDRs. [AG]
cd06127 (38) DEDDh 3'-5' exonuclease domain family.
cd07995 (1) Thiamine pyrophosphokinase.
cd10254 (33) Catalytic GIY-YIG domain of nucleotide excision repair endonucleases UvrC, Cho, and similar proteins.
cd11308 (5) Peptidase associated domain: C-terminal domain of M14 N/E carboxypeptidase; putative folding, regulation, or interaction domain.
COG0030 (5) 16S rRNA A1518 and A1519 N6-dimethyltransferase RsmA/KsgA/DIM1 (may also have DNA glycosylase/AP lyase activity) [Translation, ribosomal structure and biogenesis]
COG0290 (4) Translation initiation factor IF-3 [Translation, ribosomal structure and biogenesis]
COG0336 (2) tRNA G37 N-methylase TrmD [Translation, ribosomal structure and biogenesis]
COG0441 (23) Threonyl-tRNA synthetase [Translation, ribosomal structure and biogenesis]
COG0486 (1) tRNA U34 5-carboxymethylaminomethyl modifying GTPase MnmE/TrmE [Translation, ribosomal structure and biogenesis]
COG0525 (3) Valyl-tRNA synthetase [Translation, ribosomal structure and biogenesis]
COG0538 (76) Isocitrate dehydrogenase [Energy production and conversion]
COG0605 (32) Superoxide dismutase [Inorganic ion transport and metabolism]
COG1159 (1) GTPase Era, involved in 16S rRNA processing [Translation, ribosomal structure and biogenesis]

COG1629 (8) Outer membrane receptor proteins, mostly Fe transport [Inorganic ion transport and metabolism]
COG4389 (1) Site-specific recombinase [Replication, recombination and repair]
COG4799 (1) Acetyl-CoA carboxylase, carboxyltransferase component [Lipid transport and metabolism]
pfam00081 (1) Iron/manganese superoxide dismutases, alpha-hairpin domain.
pfam00106 (1) short chain dehydrogenase.
pfam00453 (4) Ribosomal protein L20.
pfam00593 (12) TonB dependent receptor.
pfam01245 (2085) Ribosomal protein L19.
pfam01632 (4) Ribosomal protein L35.
pfam01850 (5) PIN domain.
pfam01923 (1) Cobalamin adenosyltransferase.
pfam02628 (3) Cytochrome oxidase assembly protein.
pfam02824 (5) TGS domain.
pfam03544 (22) Gram-negative bacterial TonB protein C-terminal.
pfam03971 (8) Monomeric isocitrate dehydrogenase.
pfam06245 (7) Protein of unknown function (DUF1015).
pfam07715 (22) TonB-dependent Receptor Plug Domain.
pfam10136 (1) Site-specific recombinase.
pfam12399 (1) Branched-chain amino acid ATP-binding cassette transporter.
pfam13715 (33) CarboxypepD_reg-like domain.
pfam13723 (27) Beta-ketoacyl synthase, N-terminal domain.
pfam14054 (18) Domain of unknown function (DUF4249).
pfam14213 (5) Domain of unknown function (DUF4325).
pfam14815 (1) NUDIX domain.
pfam14905 (10) Outer membrane protein beta-barrel family.
PLN02820 (1) 3-methylcrotonyl-CoA carboxylase, beta chain
PRK00026 (2) tRNA (guanine-N(1)-methyltransferase; Reviewed
PRK00028 (4) translation initiation factor IF-3; Reviewed
PRK00089 (1) GTPase Era; Reviewed
PRK00172 (4) 50S ribosomal protein L35; Reviewed

PRK00274 (5) 16S ribosomal RNA methyltransferase KsgA/Dim1 family protein; Reviewed
PRK00413 (23) threonyl-tRNA synthetase; Reviewed
PRK05185 (4) 50S ribosomal protein L20; Provisional
PRK05291 (1) tRNA modification GTPase TrmE; Reviewed
PRK05338 (2085) 50S ribosomal protein L19; Provisional
PRK05491 (37) N-acetylmuramic acid-6-phosphate etherase; Reviewed
PRK05653 (1) 3-ketoacyl-(acyl-carrier-protein) reductase; Validated
PRK05729 (3) valyl-tRNA synthetase; Reviewed
PRK07825 (1) short chain dehydrogenase; Provisional
PRK08299 (224) isocitrate dehydrogenase; Validated
PRK08999 (16) hypothetical protein; Provisional
PRK10064 (20) catechol siderophore receptor CirA; Provisional
PRK10546 (1) pyrimidine (deoxy)nucleoside triphosphate pyrophosphohydrolase; Provisional
PRK10925 (33) superoxide dismutase; Provisional
PRK13484 (1) putative iron-regulated outer membrane virulence protein; Provisional
PTZ00435 (1) isocitrate dehydrogenase; Provisional
smart00382 (1) ATPases associated with a variety of cellular activities.
smart00465 (18) GIY-YIG type nucleases (URI domain).
smart00479 (38) exonuclease domain in DNA-polymerase alpha and epsilon chain, ribonuclease T and other exonucleases.
smart00863 (1) Threonyl and Alanyl tRNA synthetase second additional domain.
smart00983 (1) Thiamin pyrophosphokinase, vitamin B1 binding domain.
TIGR00044 (4) pyridoxal phosphate enzyme, YggS family. [Unknown function, Enzymes of unknown specificity]
TIGR00178 (8) isocitrate dehydrogenase, NADP-dependent, monomeric type. [Energy metabolism, TCA cycle]
TIGR00636 (1) ATP:cob(I)alamin adenosyltransferase. [Biosynthesis of cofactors, prosthetic

groups, and carriers, Heme, porphyrin, and cobalamin]
TIGR01859 (22) TonB family C-terminal domain. [Transport and binding proteins, Cations and iron carrying compounds]
TIGR01785 (1) TonB-dependent heme/hemoglobin receptor family protein. [Transport and binding proteins, Cations and iron carrying compounds, Transport and binding proteins, Porins]
TIGR01786 (3) TonB-dependent hemoglobin/transferrin/lactoferrin receptor family protein. [Transport and binding proteins, Cations and iron carrying compounds, Transport and binding proteins, Porins]
TIGR03150 (8) beta-ketoacyl-acyl-carrier-protein synthase II. [acyl-carrier-protein] synthase 2 (KAS-II, FabF) is involved in the condensation step of fatty acid biosynthesis in which the malonyl donor group is decarboxylated and the resulting carbanion used to attack and extend the acyl group attached to the acyl carrier protein. Most genomes encoding fatty acid biosynthesis contain a number of condensing enzymes, often of all three types: 1, 2 and 3. Synthase 2 is mechanistically related to synthase 1 (KAS-I, FabB) containing a number of absolutely conserved catalytic residues in common. This model is based primarily on genes which are found in apparent operons with other essential genes of fatty acid biosynthesis (GenProp0681). The large gap between the trusted cutoff and the noise cutoff contains many genes which are not found adjacent to genes of the fatty acid pathway in genomes that often also contain a better hit to this model. These genes may be involved in other processes such as polyketide biosyntheses. Some genomes contain more than one above-trusted hit to this model which may result from recent paralogous expansions. Second hits to this model which are not next to other fatty acid biosynthesis genes may be involved in other processes. FabB sequences should fall well below the noise cutoff of this model. [Fatty acid and phospholipid metabolism, Biosynthesis]

6.4 Multiple-sequence alignment

Each L19-Flavobacteria RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 6.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The L19-Flavobacteria RNA itself is denoted by the line underneath marked 5' and 3' on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded green. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-Crick or G-U

pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, red nucleotides: nucleotide identity conserved more than 97% of the time, black nucleotides: 90%, gray nucleotides: 75%, red circle (◉): nucleotide is present 97% of the time, black circle (◐): 90%, gray circle (◑): 75%, white circle (◒): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Cat-1-1, Cba-1-1, Cba-2-1, Cba-3-1, Cca-1-2, Cca-1-3, Cgi-1-1, Cgr-1-1, Coc-1-1, Coc-2-1, Coc-4-1, Csp-1-1, Csp-10-1, Csp-11-1, Csp-12-1, Csp-2-1, Csp-3-1, Csp-4-1, Csp-5-1,

Csp-6-1, Csp-9-1, Ean-1-3, Ean-1-4, Ean-10-1, Ean-12-1, Ean-2-1, Ean-3-1, Ean-4-1, Ean-5-1, Ean-6-1, Ean-7-1, Ean-8-1, Ean-9-1, Eme-2-2, Fca-1-2, Fen-1-2, Fps-1-1, Fps-1-10, Fps-1-2, Fps-1-3, Fps-1-4, Fps-1-5, Fps-1-6, Fps-1-7, Fps-1-8, Fps-1-9, Fps-2-1, Fps-3-1, Fsp-6-1, Fsu-2-2, Gsp-2-1, Jpa-1-2, Jpa-1-3, Lbl-1-1, Mlu-1-1, Nul-1-5, Orh-2-1, Orh-3-1, Psp-1-1, Ran-1-2, Ran-2-2, Ran-5-1, Ran-7-1, Ran-8-1, Ran-9-1, Zpr-1-1, env-100, env-1000, env-1001, env-1002, env-1004, env-1005, env-1006, env-1008, env-101, env-1013, env-1014, env-1018, env-102, env-1020, env-1022, env-1024, env-1028, env-103, env-1030, env-1031, env-1032, env-1033, env-1035, env-1036, env-1037, env-104, env-1041, env-1043, env-1044, env-1045, env-1046, env-105, env-1050, env-1051, env-1054, env-1055, env-1056, env-106, env-1061, env-1065, env-1071, env-1077, env-1078, env-1079, env-108, env-1082, env-1083, env-1087, env-109, env-1090, env-1093, env-1094, env-11, env-110, env-1100, env-1101, env-1102, env-1103, 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 Gli-1-1 AUG

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env-1095 AUG
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env-1099 AUG
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env-1107 AUG
Aag-1-1 AUG
Ead-1-1 AUG
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env-1116 AUG
Lsp-3-1 AUG
env-1118 AUG
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Lja-1-1 AUG
Lsp-1-1 AUG
env-1124
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Pgo-1-1 AUG
env-1125 AUG
env-1127 AUG
env-1128
Ptr-1-1 AUG
env-1129 AUG
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env-1136 AUG
Gsp-4-1 AUG
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env-1141 AUG
env-1142 AUG
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env-1197 AUG
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Apa-1-1 AUG
env-1205 AUG
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Fba-6-1 AUG
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 env-1217 AUG
 Fag-1-1 AUG
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 env-1221 AUG
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 Ame-1-1 AUG
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 Fsp-3-1 AUG
 env-1227 AUG
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 Ala-1-1 AUG
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 Gpo-1-1 AUG
 Oma-1-1 AUG
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 env-1280 UGG
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 Fsp-7-1 AUG
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 Ffr-1-1 AUG
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 Osp-1-1 AUG
 Osp-2-1 AUG
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 Ssp-2-1 AUG
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 Fsp-9-1 AUG
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Gsp-5-1
Fsp-11-1
Fsp-1-1AUG
env-1307
Psp-3-1
env-1308
env-1309AUG
env-1310
Gme-1-1
env-1311
env-1312AUG
env-1314
Min-1-1
env-1317
env-1318
env-1319
env-1320
Ssp-1-1
env-1321
Fsu-2-1
env-1322
env-1323
env-1326
env-1327
Mze-2-1
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Myu-1-1
Gsa-1-1
Amu-1-1
Fen-1-1AUG
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Fse-1-1
Fda-1-1
Dsp-2-1
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env-1335AUG
env-1336AUG
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env-1342
Zam-1-1
Gec-1-1
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env-1347AUG
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 Kzh-1-1 AUG
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env-1839 AUG
env-1840 AUG
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env-1844 AUG

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env-1845
env-1846 AUG
env-1848 AUG
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env-1851 AUG
env-1853 AUG
env-1855 AUG
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env-1857 AUG
env-1860 AUG
env-1861 AUG
Ala-2-1 AUG
env-1862 AUG
Ndo-1-1 AUG
env-1863 AUG
env-1864 AUG
Cal-1-1 AUG
env-1865 AUG
Csp-13-1 AUG
Mfo-1-1 AUG
Cba-4-1 AUG
env-1866 AUG
env-1867 AUG
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env-1875 AUG
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env-1894 AUG
env-1898 AUG
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env-1918 AUG
env-1919 AUG
env-1921 AUG
env-1922 AUG
env-1923 AUG
Ran-1-1 AUG
env-1924
env-1925 AUG
env-1929 AUG
env-1930 AUG
env-1931 AUG
env-1932 AUG
Ran-6-1 AUG
env-1933
env-1934 AUG
env-1968 AUG
env-1977 AUG
env-1978 AUG
env-1984 AUG
env-1987 AUG
env-1988 AUG
env-1989 AUG
env-1990 AUG
env-1991 AUG
env-1993 AUG
Ran-2-1 AUG
Rco-1-1 AUG
env-1994 AUG
env-1995 AUG
env-1996 AUG
env-1997 AUG
env-1998 AUG
env-1999 AUG
env-2000 AUG
Ran-3-1 AUG
env-2001 AUG
env-2032 AUG
env-2033 AUG
env-2034 AUG
env-2035 AUG
Fge-1-1 AUG
Nma-1-1 AUG

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env-2036 ..... AUG
env-2047 ..... AUG
env-2048 ..... AUG
env-2050 ..... AUG
env-2051 ..... AUG
env-2052 ..... AUG
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env-2079 ..... AUG
env-2080 ..... AUG
env-2098 ..... AUG
env-2100 ..... AUG
env-2101 ..... AUG
env-2102 ..... AUG
env-2103 ..... AUG
env-2104 ..... AUG
env-2121 ..... AUG
env-2122 ..... AUG
env-2123 ..... AUG
Fps-4-1 ..... AUG
Ran-4-1 ..... AUG
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7 L20-Deltaproteobacteria

7.1 Taxa

The taxonomy of each organism containing a putative L20-Deltaproteobacteria RNA is listed, with abbreviations identifying each hit (e.g., “Eco-1-1” and “Eco-1-2” might hypothetically represent two distinct RNAs in *E. coli*). The abbreviations will be used to identify each individual L20-Deltaproteobacteria RNA in Sections 7.2 and 7.4:.

abbrev. of hits	taxonomy of species
Dac-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Desulfuromonadaceae <i>Desulfuromonas acetoxidans</i> DSM 684
Dsp-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Desulfuromonadaceae <i>Desulfuromonas</i> sp. TF
Pse-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Desulfuromonadaceae <i>Pelobacter seleniigenes</i> DSM 18267
Gfe-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geoalkalibacter ferrihydriticus</i> DSM 17813
Gsu-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geoalkalibacter subterraneus</i>
Gbe-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter bemidjensis</i> Bem
Gbr-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter bremensis</i> R1
Glo-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter lovleyi</i> SZ
Gme-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter metallireducens</i> GS-15
Gme-2-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter metallireducens</i> RCH3
Gpi-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter pickeringii</i>
Gso-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter soli</i>
Gsp-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter</i> sp. FRC-32
Gsp-2-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter</i> sp. M18
Gsp-3-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter</i> sp. M21
Gsp-4-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter</i> sp. OR-1
Gsu-2-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter sulfurreducens</i>
Gsu-3-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter sulfurreducens</i> KN400
Gsu-4-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter sulfurreducens</i> PCA
Gur-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geobacter uraniireducens</i> Rf4
Gel-1-1	Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Geobacteraceae <i>Geopsychrobacter electrophilus</i> DSM 16401

Pca-1-1 Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Pelobacteraceae *Pelobacter carbinolicus* DSM 2380
 Ppr-1-1 Bacteria Proteobacteria Deltaproteobacteria Desulfuromonadales Pelobacteraceae *Pelobacter propionicus* DSM 2379
 env-1 to env-179 environmental samples

7.2 Gene contexts

Each L20-Deltaproteobacteria RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one L20-Deltaproteobacteria RNA are assigned a color; other domains are gray. Information about these conserved

domains is given in Section 7.3. The accession of the sequence containing each L20-Deltaproteobacteria RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each L20-Deltaproteobacteria RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 7.1.

abbrev.	Seq. accession		5′ at	3′ at	genes
env-1	3300000558_10042364	-	210	132	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-2	KVRMV2_101537624	-	193	105	RNA→ rpIT (PRK05185)rpl20 (CHL00068)→
env-3	LGVD01016786.1	+	10188	10263	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-4	LGVE01096777.1	+	810	885	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-5	LGVF011151704.1	-	2284	2209	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-6	LGVF01446591.1	-	671	594	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-7	JGI24023J19991_10001126	+	6175	6251	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
Pse-1-1	NZ_JOMG01000004.1	+	547284	547360	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-8	M940M_1000089	-	2577	2501	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-9	M590M1_1000913	-	8384	8460	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-10	M590M2_1001691	-	8449	8373	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-11	SA_S1_NOR05_45m_c10229484	-	170	92	RNA→ rpIT (PRK05185)rpl20 (CHL00068)→
Gel-1-1	NZ_ARWE01000001.1	+	1492573	1492658	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-12	KVRMV2_100037767	-	14415	14351	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→
env-13	3300001605_10126988	+	58	114	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ syfB (CHL00192)pheT (PRK00629)→
env-14	3300001605_10740178	+	188	244	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-15	3300001605_10006506	+	12971	13027	RNA→
env-16	3300001605_10708600	+	200	256	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-17	LWFCAn_GLO1YSU01EBI9B	+	3	64	RNA→ hypo→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-18	lwComb_BHFI11626_g1	+	746	807	RNA→
env-19	2034067870	+	177	238	RNA→ rpIT (PRK05185)Ribosomal_L20 (cd07026)→
env-20	LWFCAn_GLO1YSU01D9AZM	-	414	353	RNA→ hypo→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-21	LWFCAn_GLZZ6Z001ECB4G	-	114	53	RNA→ ←hypo
env-22	LWFCAnN_GO09JKT02GDB9I	+	274	335	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
Ppr-1-1	NC_008609.1	-	2488533	2488474	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→ ihfA (PRK00285)IHF_A (cd13835)→ HTH_MlrA-like_sg2 (cd04765)MerR_1 (pfam13411)→ hypo→ hypo→ hypo→ hypo→ hypo→
env-23	JGI11944J13513_1245443	-	94	39	RNA→
env-24	3300000032_0015669	-	35340	35277	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→
env-25	3300000568_10008200	+	165385	165448	RNA→ rpIT (PRK05185)Ribosomal_L20 (pfam00453)→

env-59	3300001580_11172117	-	105	50	RNA→
env-60	3300000032_0024462	-	15336	15280	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→
env-61	JGI24728J21555_1009694	-	2660	2605	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)B3_4 (pfam03483)→
env-62	JGI24728J21555_1023465	+	254	309	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→
env-63	JGI24730J26740_1004602	-	3221	3166	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→
env-64	JGI24730J26740_1000449	-	28604	28549	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→
Glo-1-1	NC_010814.1	+	1993020	1993075	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→ DUF3373 (pfam11853)→
env-65	JGI24728J21555_1018455	+	1325	1380	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ pheS (PRK00488)Phe.tRNA-synt_N (pfam02912)→
env-66	PCEOT_F164E7T01BG9SK	+	218	273	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-67	IMNBL1_c0232076	+	282	341	RNA→ rplT (PRK05185)rpl20 (CHL00068)→
env-68	JGI994J12354_10020529	-	91	32	RNA→ ←hypo
env-69	JGI994J12354_10102055	-	91	32	RNA→
env-70	JGI24728J21555_1023893	-	695	633	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ pheS (PRK00488)Phe.tRNA-synt_N (pfam02912)→
env-71	3300000568_10095751	-	3182	3123	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-72	3300000568_10166208	+	543	602	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-73	3300000568_10910092	-	126	67	RNA→ hypo→
env-74	3300001580_10542033	-	192	133	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-75	3300001567_10003592	+	12408	12467	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-76	3300000558_10376168	-	3122	3060	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→
env-77	3300000032_0032030	-	654	593	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ pheS (PRK00488)Phe.tRNA-synt_N (pfam02912)→
env-78	3300000568_10567303	-	669	608	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ pheS (PRK00488)Phe.tRNA-synt_N (pfam02912)→
Gso-1-1	NZ_JXBL01000001.1	-	1713733	1713668	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→ ihfA (PRK00285)IHF_A (cd13835)→ HTH_MlrA-like_sg2 (cd04765)MerR_1 (pfam13411)→ hypo→
Gsu-2-1	NZ_CP010430.1	-	4273106	4273044	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→ ihfA (PRK00285)IHF_A (cd13835)→ HTH_MlrA-like_sg2 (cd04765)MerR_1 (pfam13411)→ hypo→
env-79	ACD53_150	-	7941	7879	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)B3_4 (pfam03483)→ PheT (COG0072)pheT (PRK00629)→ ihfA (PRK00285)IHF_A (cd13835)→ HTH_MlrA-like_sg2 (cd04765)MerR_1 (pfam13411)→ hypo→
Gsu-4-1	NC_002939.5	+	1664846	1664908	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→ ihfA (PRK00285)IHF_A (cd13835)→ HTH_MlrA-like_sg2 (cd04765)MerR_1 (pfam13411)→ hypo→ hypo→ hypo→ hypo→
Gsu-3-1	NC_017454.1	+	1634500	1634562	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→ ihfA (PRK00285)IHF_A (cd13835)→ HTH_MlrA-like_sg2 (cd04765)MerR_1 (pfam13411)→ hypo→ hypo→ hypo→ hypo→
Gpi-1-1	NZ_CP009788.1	-	1887990	1887929	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→ ihfA (PRK00285)IHF_A (cd13835)→ HTH_MlrA-like_sg2 (cd04765)MerR_1 (pfam13411)→ hypo→ SurE (COG0496)surE (PRK00346)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ Apt (COG0503)PRK02304 (PRK02304)→
env-80	JXWW01164903.1	-	235	172	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→
Gsp-4-1	NZ_BAZF01000009.1	+	8601	8663	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→ ihfA (PRK00285)IHF_A (cd13835)→ HTH_MlrA-like_sg2 (cd04765)MerR_1 (pfam13411)→ hypo→
env-81	3300001567_10543765	+	112	171	RNA→ ←hypo
env-82	3300001567_10545448	-	129	70	RNA→ ←hypo
env-83	3300000568_10531113	+	84	144	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-84	3300000032_0125795	-	2173	2113	RNA→ rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→

env-110	2232073740	-	430	354	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-111	3300000558_10134028	+	138	216	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-112	3300000558_11394841	-	255	177	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-113	3300000568_10011739	-	718	640	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-114	3300001567_10107199	-	546	468	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
Dsp-1-1	NZ_KI421413.1	-	228136	228058	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-115	3300001580_10000645	+	14984	15060	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-116	3300000558_11481507	-	595	519	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-117	3300000558_11690408	+	653	728	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
Pca-1-1	NC_007498.2	+	1669010	1669085	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-118	3300001567_10001919	+	18381	18456	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) → PheS (COG0016)pheS (PRK00488) → PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796) →
env-119	3300000558_10022538	-	6809	6737	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) → PheS (COG0016)pheS (PRK00488) → PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796) →
env-120	3300000558_10299282	+	347	425	RNA →
env-121	SA_S1_NOR05_45m_c10345692	-	276	199	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-122	SA_S1_NOR05_45m_c10511679	-	159	82	RNA → rplT (PRK05185)rpl20 (CHL00068) →
env-123	SA_S2_NOR18_50m_1106132	-	249	173	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-124	SA_S2_NOR13_50m_c1176942	+	189	265	RNA →
env-125	SA_S1_NOR05_45m_c10000719	+	2825	2901	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-126	SA_S1_NOR08_45m_c10011655	+	1979	2055	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-127	SA_S1_NOR08_45m_c10015541	+	2845	2921	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-128	SA_S2_NOR15_50m_c10016791	+	1291	1367	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-129	SA_S1_NOR02_45m_c1003376	-	909	833	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-130	SA_S2_NOR15_50m_c10152710	-	153	77	RNA → rplT (PRK05185)rpl20 (CHL00068) →
env-131	SA_S1_NOR05_45m_c10069212	+	630	706	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-132	SA_S1_NOR02_45m_c1134354	-	100	24	RNA → ← hypo
env-133	SA_S1_NOR08_45m_c10008401	-	164	88	RNA → rplT (PRK05185)rpl20 (CHL00068) →
env-134	SA_S2_NOR13_50m_c1190193	+	137	213	RNA →
env-135	SA_S1_NOR05_45m_c10026777	-	566	490	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) → hypo →
env-136	SA_S1_NOR08_45m_c10014299	+	2144	2220	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-137	SA_S2_NOR15_50m_c10136720	+	639	715	RNA → rplT (PRK05185)rpl20 (CHL00068) →
env-138	SA_S1_NOR02_45m_c1067657	+	160	236	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-139	SA_S2_NOR13_50m_c1078169	-	216	139	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-140	SA_S1_NOR05_45m_c10009856	+	2006	2083	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-141	SA_S1_NOR08_45m_c10000806	+	2877	2954	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-142	SA_S2_NOR15_50m_c10001918	+	2889	2966	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-143	SA_S1_NOR02_45m_c1117957	+	138	215	RNA → rplT (PRK05185)rpl20 (CHL00068) →
env-144	SA_S2_NOR18_50m_1236664	+	180	257	RNA →
env-145	SA_S1_NOR05_45m_c10219562	+	174	251	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-146	SA_S2_NOR15_50m_c10184235	+	79	156	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-147	SA_S2_NOR15_50m_c10184235	+	392	469	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-148	SA_S1_NOR05_45m_c10004739	+	2326	2403	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-149	SA_S1_NOR08_45m_c10004622	-	3588	3511	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-150	SA_S2_NOR15_50m_c10019150	+	2898	2975	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-151	SA_S2_NOR15_50m_c10106824	-	231	154	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-152	SA_S1_NOR02_45m_c1126557	+	164	241	RNA → rplT (PRK05185)rpl20 (CHL00068) →
env-153	ASA120_GJFD58A02GB27U	-	120	43	RNA →
env-154	BS_KBA_SWE12_21m_c10210524	+	169	246	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-155	BS_KBA_SWE21_205m_10288133	+	106	183	RNA → rplT (PRK05185)Ribosomal_L20 (pfam00453) →
env-156	BS_KBA_SWE02_21m_10654080	-	133	56	RNA →
env-157	BS_KBA_SWE12_21m_c10693372	-	146	69	RNA → rplT (PRK05185)rpl20 (CHL00068) →
env-158	BS_KBA_SWE21_205m_10269672	+	184	261	RNA → rplT (PRK05185)rpl20 (CHL00068) →

env-159	BS_KBA_SWE12_21m.c10454375	-	178	101	RNA→	rplT (PRK05185)rpl20 (CHL00068)→
env-160	KGL_S1_ANT01_95m.c10080207	-	841	763	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→ pheS (PRK00488)Phe_tRNA-synt_N (pfam02912)→
env-161	ASLM20b_GM71RDO02F8O89	+	134	212	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-162	ASA120_GJFD58A02J09L8	-	396	318	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-163	SA_S1_NOR08_45m.c10161630	-	206	128	RNA→	rplT (PRK05185)rpl20 (CHL00068)→
env-164	SA_S2_NOR15_50m.c10056163	+	270	348	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→ hypo→ PheS (COG0016)pheS (PRK00488)→
env-165	SA_S2_NOR13_50m.c1030706	-	679	601	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→ hypo→ pheS (PRK00488)Phe_tRNA-synt_N (pfam02912)→
env-166	SA_S1_NOR08_45m.c10303771	-	125	47	RNA→	
env-167	SA_S1_NOR05_45m.c10043877	+	802	880	RNA→	
env-168	SA_S2_NOR15_50m.c10070834	-	112	34	RNA→	
env-169	SA_S1_NOR05_45m.c10169234	+	253	331	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-170	SA_S1_NOR08_45m.c10013077	+	3405	3483	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-171	SA_S1_NOR08_45m.c10110821	-	352	274	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-172	SA_S2_NOR15_50m.c10446830	+	267	345	RNA→	
env-173	SA_S2_NOR18_50m.1021448	+	190	268	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→ hypo→ pheS (PRK00488)Phe_tRNA-synt_N (pfam02912)→
env-174	LGOV01008591.1	+	13588	13681	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-175	LGVE01183011.1	+	6160	6253	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-176	LGVF01312494.1	+	20148	20241	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→
env-177	3300001580_10002513	-	10447	10365	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→ PheT (COG0072)pheT (PRK00629)tRNA_bind_bactPheRS (cd02796)→ ihfA (PRK00285)IHF_A (cd13835)→ HTH_MlrA-like_sg2 (cd04765)MerR_1 (pfam13411)→ SurE (COG0496)surE (PRK00346)→ Pcm (COG2518)Methyltransf_25 (pfam13649)→ YgaA (COG1238)SNARE_assoc (pfam09335)→ LysM (smart00257)LysM (cd00118)Peptidase_M23 (pfam01551)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ Apt (COG0503)PRK02304 (PRK02304)→ hypo→
env-178	3300000558_10371857	-	2112	2038	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→
env-179	3300001580_10030616	-	3653	3579	RNA→	rplT (PRK05185)Ribosomal_L20 (pfam00453)→ PheS (COG0016)pheS (PRK00488)→

7.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 7.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one L20-

cd00118 (1) Lysine Motif is a small domain involved in binding peptidoglycan.
cd02796 (35) tRNA-binding-domain-containing prokaryotic phenylalanly tRNA synthetase (PheRS) beta chain.
cd04765 (18) Helix-Turn-Helix DNA binding domain of putative MlrA-like transcription regulators.
cd06158 (1) Uncharacterized homologs of Site-2 protease (S2P), zinc metalloproteases (MEROPS family M50) which cleave transmembrane domains of substrate proteins, regulating intramembrane proteolysis (RIP) of diverse signal transduction mechanisms.
cd07026 (1) Ribosomal protein L20.
cd13835 (18) Alpha subunit of integration host factor (IHFA).
CHL00068 (15) ribosomal protein L20
CHL00192 (1) phenylalanyl-tRNA synthetase beta chain; Provisional
COG0016 (48) Phenylalanyl-tRNA synthetase alpha subunit [Translation, ribosomal structure and biogenesis]

Deltaproteobacteria RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 7.2.

COG0072 (35) Phenylalanyl-tRNA synthetase beta subunit [Translation, ribosomal structure and biogenesis]
COG0180 (1) Tryptophanyl-tRNA synthetase [Translation, ribosomal structure and biogenesis]
COG0496 (8) Broad specificity polyphosphatase and 5'/3'-nucleotidase SurE [Replication, recombination and repair]
COG0508 (4) Adenine/guanine phosphoribosyltransferase or related PRPP-binding protein [Nucleotide transport and metabolism]
COG0568 (4) DNA-directed RNA polymerase, sigma subunit (sigma70/sigma32) [Transcription]
COG0739 (2) Murein DD-endopeptidase MepM and murein hydrolase activator NlpD, contain LysM domain [Cell wall/membrane/envelope biogenesis]
COG0789 (1) DNA-binding transcriptional regulator, MerR family [Transcription]
COG1238 (3) Uncharacterized membrane protein YqaA, SNARE-associated domain [Function unknown]
COG1354 (1) Chromatin segregation and condensation protein Rec8/ScpA/Sccl, kleisin family

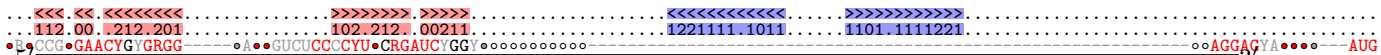
env-104 CACAAUUGUCGAGUCGCGGAUCAUAAAAUACAGUUGCCUGAUUCCUUAACAAGGGAACCGCAACUCGGCUUA
env-106 GUGCACAAGGCGGAUCGCGCAAACAUACAGUCGCCUUAUCCUUAUCUGUAACCGGUAACGGAACCCAGUUUCGGCUUA
env-107

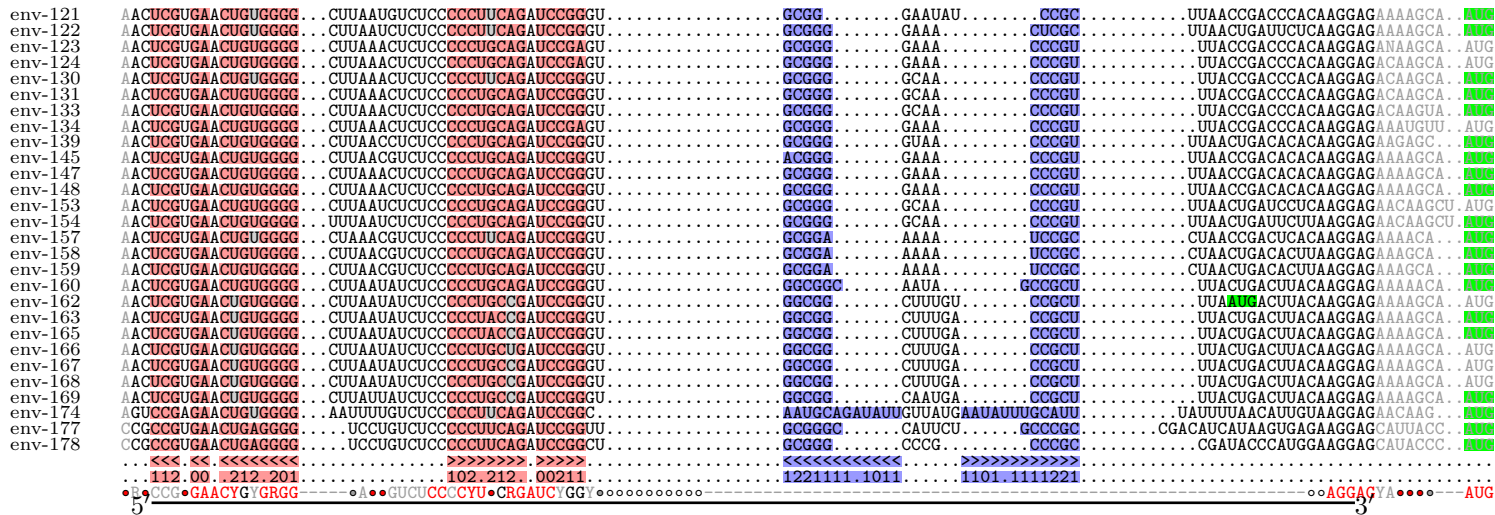
alignment positions 78 .. 216

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env-1 ACCCCGUAACUGGGGGG . . . AUACGGUCCCCUCUCAGAUCGG . . . CGAGCGCU . . . UUU . . . GGCCUUG . . . . . ACAAAUUAACCUAAGGAGAAAGAG . . . AUG
env-2 UUUUCGUAACUGGGGG . . . ACCAUUCCCCUCGAGAUCGGCAAGCGCGCAUUGUGCGAG . . . AAGAUG . . . UAUU . . . CAUUUU . . . . . AAAGAUAGAAGGAAGGAAGAG . . . AUG
env-3 CGCUGCAAUCUGGGGG . . . ACGAUUCCCCUCGAGAUCGGCCA . . . CGGC . . . AAAU . . . GCGG . . . . . AAACCAUUUAGAGAGAAAGGCAAGUGAG . . . AUG
env-6 CGGUUGGAAUCUGGGGG . . . ACAUUCCCUCGAGAUCGGCCA . . . CGGC . . . AGUU . . . GCGG . . . . . AAAAAUAUUCAUUGAGAAGGAGCAAGCGAG . . . AUG
env-7 AGUUGGAAUCUGGGGG . . . ACAUUCCCUCGAGAUCGGCCA . . . CGGC . . . AGAU . . . GCGG . . . . . AAAAAUAUUUAGAGAAGGCAAGUGAG . . . AUG
Pse-1 UGUUGGAAUCUGGGGG . . . ACA UCCCUCGAGAUCGGCCG . . . CGGC . . . AUA . . . GCGG . . . . . AAACAUAUUUAGAGAAGGAGCAAGUGAG . . . AUG
env-8 UGUUGGAAUCUGGGGG . . . AUA UCCCUCGAGAUCGGCCG . . . CGGC . . . AUAU . . . GCGG . . . . . AAACAUAUUUAGAGAAGGCAAGUGAG . . . AUG
env-9 UGUUGGAAUCUGGGGG . . . AUA UCCCUCGAGAUCGGCCG . . . CGGC . . . AUA . . . GCGG . . . . . AAACAUAUUUAGAGAAGGAGCAAGUGAG . . . AUG
env-11 UGCUGGAAUCUGGGGG . . . ACAUUCCCUCGAGAUCGGCCG . . . CGGC . . . UUAU . . . GCGG . . . . . AAAAAUAUAUUUAGAGAAGGCAAGAGAG . . . AUG
Gel-1-1 ACCUUGGAAUCUGGGGG . . . ACCAUCCCCUCGAGAUCGGCA . . . CGGU . . . CUUA . . . ACCGAAUCUUUAAAUAUUUACCCAAAGGAGGCAAGAGAG . . . AUG
env-12 UAGUCGAAUCUGGGGGACAUUUUCAGUCCCCUCAGAUCGGCGAAUACACAGA . . . . . UUA . . . AAAC . . . UGA . . . . . AGGAGGAGAU . . . AUG
env-13 CAUCCCGAAUCUGGAGG . . . AACGG . . . CCCUUGCGAUCGGCAAA . . . . . UUA . . . AAAC . . . UGA . . . . . AGGAGUCAAAG . . . AUG
env-14 CAUCCCGAAUCUGGAGG . . . AACGG . . . CCCUUGCGAUCGGCAAA . . . . . UUA . . . AAAC . . . UGA . . . . . AGGAGUCAAAG . . . AUG
env-15 CAUCCCGAAUCUGGAGG . . . AACGG . . . CCCUUGCGAUCGGCAAA . . . . . UUA . . . AAAC . . . UGA . . . . . AGGAGUCAAAG . . . AUG
env-16 CAUCCCGAAUCUGGAGG . . . AACGG . . . CCCUUGCGAUCGGCAAA . . . . . UUA . . . AAAC . . . UGA . . . . . AGGAGUCAAAG . . . AUG
env-17 CCCAAAGAACCUAGG . . . AAAUUGUCCCCUUAGGAUCGGUAAUUAACCAAUA . . . . . UUA . . . AAAC . . . UGA . . . . . AGGAGUCAAAG . . . AUG
env-18 AUGCAAAGAACCUAGG . . . AAAUUGUCCCCUUAGGAUCGGUAAUUAACCAAUA . . . . . UUA . . . AAAC . . . UGA . . . . . AGGAGUCAAAG . . . AUG
env-19 AUGCAAAGAACCUAGG . . . AAAUUGUCCCCUUAGGAUCGGUAAUUAACCAAUA . . . . . UUA . . . AAAC . . . UGA . . . . . AGGAGUCAAAG . . . AUG
env-20 AUGCAAAGAACCUAGG . . . AAAUUGUCCCCUUAGGAUCGGUAAUUAACCAAUA . . . . . UUA . . . AAAC . . . UGA . . . . . AGGAGUCAAAG . . . AUG
env-21 AUGCAAAGAACCUAGG . . . AAAUUGUCCCCUUAGGAUCGGUAAUUAACCAAUA . . . . . UUA . . . AAAC . . . UGA . . . . . AGGAGUCAAAG . . . AUG
Ppr-1-1 ACCCCAAAGAACCAGG . . . ACAGUCCCCCUUAGGAUCGGCAAA . . . . . AUU . . . CAU . . . GAU . . . . . CAAGGAGUAGAA . . . AUG
env-23 CAGCCAAAGAACCUAGG . . . AACGG . . . CCCUUGCGAUCGGUAAUUAACCAAUA . . . . . AUU . . . CAU . . . GAU . . . . . CAAAGGAGUAGAA . . . AUG
env-24 GAGCCAAAGAACCUAGG . . . AAAUUGUCCCCUUAGGAUCGGUAAUUAACCAAUA . . . . . AUU . . . CAU . . . GAU . . . . . CAAAGGAGUAGAA . . . AUG
env-25 GAGCCAAAGAACCUAGG . . . AACGG . . . CCCUUGCGAUCGGUAAUUAACCAAUA . . . . . AUU . . . CAU . . . GAU . . . . . CAAAGGAGUAGAA . . . AUG
env-26 GAGCCAAAGAACCUAGG . . . AACGG . . . CCCUUGCGAUCGGUAAUUAACCAAUA . . . . . AUU . . . CAU . . . GAU . . . . . CAAAGGAGUAGAA . . . AUG
env-27 GAGCCAAAGAACCUAGG . . . AACGG . . . CCCUUGCGAUCGGUAAUUAACCAAUA . . . . . AUU . . . CAU . . . GAU . . . . . CAAAGGAGUAGAA . . . AUG
env-28 GAGCCAAAGAACCUAGG . . . AACGG . . . CCCUUGCGAUCGGUAAUUAACCAAUA . . . . . AUU . . . CAU . . . GAU . . . . . CAAAGGAGUAGAA . . . AUG

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8 L25-Gammaproteobacteria

8.1 Taxa

The taxonomy of each organism containing a putative L25-Gammaproteobacteria RNA is listed, with abbreviations identifying each hit (e.g., “Eco-1-1” and “Eco-1-2” might hypothetically represent two distinct RNAs in *E. coli*). The abbreviations will be used to identify each individual L25-Gammaproteobacteria RNA in Sections ?? and 8.2:.

abbrev. of hits	taxonomy of species
Sen-1-1	AKU_12601Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar Paratyphi A</i>
bsy-1-1	str Bacteria bacteria symbiont BFo1 of <i>Frankliniella occidentalis</i>
bsy-2-1	Bacteria bacteria symbiont BFo2 of <i>Frankliniella occidentalis</i>
Baq-1-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Budviciaceae <i>Budvicia aquatica</i> DSM 5075 = ATCC 35567
Lgr-1-1 to Lgr-1-2	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Budviciaceae <i>Leminorella grimontii</i> ATCC 33999 = DSM 5078
Pfo-1-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Budviciaceae <i>Pragia fontium</i>
Bag-1-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Buttiauxella agrestis</i>
Bag-2-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Buttiauxella agrestis</i> ATCC 33320
Cne-1-1 to Cne-1-3	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Cedecea neteri</i>
Cam-1-1 to Cam-1-3	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Citrobacter amalonaticus</i>
Cam-2-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Citrobacter amalonaticus</i> Y19
Cfa-1-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Citrobacter farmeri</i> GTC 1319
Cbr-1-1 to Cbr-1-6	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Citrobacter Citrobacter freundii</i> complex <i>Citrobacter braakii</i>
Cfr-1-1 to Cfr-1-4	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Citrobacter Citrobacter freundii</i> complex <i>Citrobacter freundii</i>
Cfr-2-1 to Cfr-2-2	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Citrobacter Citrobacter freundii</i> complex <i>Citrobacter freundii</i> ATCC 8090 = MTCC 1658
Cfr-3-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Citrobacter Citrobacter freundii</i> complex <i>Citrobacter freundii</i> CFNIH1
Cfr-4-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Citrobacter Citrobacter freundii</i> complex <i>Citrobacter freundii</i> MGH 56
Cfr-5-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Citrobacter Citrobacter freundii</i> complex <i>Citrobacter freundii</i> NBRC 12681
Cfr-6-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Citrobacter Citrobacter freundii</i> complex <i>Citrobacter freundii</i> RLS1

Cfr-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter freundii</i> UCI 31
Cfr-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter freundii</i> UCI 32
Cse-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter sedlakii</i> NBRC 105722
Csp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter sp.</i> BIDMC107
Csp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter sp.</i> BIDMC108
Csp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter sp.</i> MGH100
Csp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter sp.</i> MGH103
Csp-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter sp.</i> MGH104
Csp-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter sp.</i> MGH105
Csp-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter sp.</i> MGH106
Csp-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter sp.</i> MGH109
Csp-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter sp.</i> MGH110
Csp-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter sp.</i> MGH99
Cwe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex	<i>Citrobacter werkmanii</i> NBRC 105721
Cko-1-1 to Cko-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Citrobacter koseri</i>	
Cpa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Citrobacter pasteurii</i>	
Cro-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Citrobacter rodentium</i>	
Cro-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Citrobacter rodentium</i> NBRC 105723	
Csp-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Citrobacter sp.</i> JT3	
Csp-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Citrobacter sp.</i> MGH 55	
Csp-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Citrobacter sp.</i> S-77	
Cdu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter dublinensis subsp. dublinensis</i> LMG 23823	
Cdu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter dublinensis subsp. lactaridi</i> LMG 23825	
Cdu-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter dublinensis subsp. lausannensis</i> LMG 23824	
Cma-1-1 to Cma-1-5	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter malonaticus</i>	
Cma-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter malonaticus</i> ENBT0334	
Cma-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter malonaticus</i> LMG 23826	
Cmu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter muytjensii</i> ATCC 51329	
Csa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter sakazakii</i>	
Csa-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter sakazakii</i> 2151	
Csa-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter sakazakii</i> 8399	
Csa-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter sakazakii</i> E764	
Csa-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter sakazakii</i> ES35	
Csa-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter sakazakii</i> ES713	
Csa-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter sakazakii</i> NBRC 102416	
Csa-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter sakazakii</i> NCIMB 8272	
Ctu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter turicensis</i> z508	
Ctu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter turicensis</i> z610	
Cun-1-1 to Cun-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae		<i>Cronobacter universalis</i> NCTC 9529	
Eas-1-1 to Eas-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter asburiae</i>
Eas-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter asburiae</i> C1
Eas-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter asburiae</i> L1
Eca-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter cancerogenus</i>
Eca-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter cancerogenus</i>
Ecl-1-1 to Ecl-1-12								YZ1
Ecl-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter cloacae</i>
	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter cloacae</i> 'Hoffmann cluster III' MGH 13
Ecl-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter cloacae</i> BIDMC 33A
Ecl-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter cloacae</i> BIDMC 66
Ecl-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter cloacae</i> BIDMC 67
Ecl-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter cloacae</i> BIDMC 8
Ecl-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacterales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter cloacae</i> BWH 43

Ksp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella sp.</i>	RIT-PI-d
Kva-1-1 to Kva-1-7	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella variicola</i>	
Kas-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kluyvera ascorbata</i>	ATCC 33433
Kcr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kluyvera cryocrescens</i>	
Kor-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kosakonia oryzae</i>	
Kra-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kosakonia radicumcicans</i>	UMEnt01/12
Kra-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kosakonia radicumcicans</i>	YD4
Lad-1-1 to Lad-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Leclercia adecarboxylata</i>	
Lad-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Leclercia adecarboxylata</i>	ATCC 23216 = NBRC 102595
Lsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Leclercia sp.</i>	LK8
Lam-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Lelliottia amnigena</i>	CHS 78
Msp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Mangrovibacter sp.</i>	MFB070
Mma-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Metakosakonia massiliensis</i>	JC163
Pge-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pluralibacter gergoviae</i>	
Pvu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pseudeschherichia vulneris</i>	NBRC 102420
Ror-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella ornithinolytica</i>	
Ror-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella ornithinolytica</i>	2-156-04.S1.C1
Ror-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella ornithinolytica</i>	2-156-04.S1.C2
Ror-4-1 to Ror-4-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella ornithinolytica</i>	B6
Rpl-1-1 to Rpl-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella planticola</i>	
Rpl-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella planticola</i>	ATCC 33531
Rte-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella terrigena</i>	
Sbo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella bongori serovar</i>	48:z41:- str. RKS3044
Sen-2-1 to Sen-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica</i>	
Sen-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. arizonae serovar</i>	62:z36:- str. RKS2983
Sen-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica</i>	
Sen-5-1 to Sen-5-6	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	4,12:i:-
Sen-6-1 to Sen-6-5	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	4,5,12:i:-
Sen-7-1 to Sen-7-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	4,[5],12:i:-
Sen-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	8,(20):-:z6
Sen-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	9,12:l,v:- str. 94293
Sen-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Abaetetuba str. ATCC 35640
Sen-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Abony str. 0014
Sen-12-1 to Sen-12-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Agona
Sen-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Agona str. 460004 2-1
Sen-14-1 to Sen-14-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Albany
Sen-15-1 to Sen-15-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Anatum
Sen-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Anatum str. 06-0532
Sen-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Anatum str. ATCC BAA-1592
Sen-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Aqua str. NVSL2001
Sen-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. 07-0873
Sen-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000178
Sen-21-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000179
Sen-22-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000180
Sen-23-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000181
Sen-24-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000182
Sen-25-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000184
Sen-26-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000185
Sen-27-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000186
Sen-28-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000187
Sen-29-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000188
Sen-30-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000190
Sen-31-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000191
Sen-32-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000192
Sen-33-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000193
Sen-34-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000194
Sen-35-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000195
Sen-36-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000196
Sen-37-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000198
Sen-38-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000199
Sen-39-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000201
Sen-40-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i>	Bareilly str. CFSAN000202

Sfl-24-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	2005GS061
Sfl-25-1 to Sfl-25-14	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	2a
Sfl-26-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	51575
Sfl-27-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	51576
Sfl-28-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	51577
Sfl-29-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi05SX04
Sfl-30-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06AH028
Sfl-31-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06AH091
Sfl-32-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06AH116
Sfl-33-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06AH130
Sfl-34-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06AH135
Sfl-35-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06AH66
Sfl-36-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06GS07
Sfl-37-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06GS37
Sfl-38-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06GS43
Sfl-39-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06GS48
Sfl-40-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06GS55
Sfl-41-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06HN016
Sfl-42-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06HN023
Sfl-43-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06HN091
Sfl-44-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06HN118
Sfl-45-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06HN159
Sfl-46-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06HN244
Sfl-47-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06HN250
Sfl-48-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06HN378
Sfl-49-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06SX36
Sfl-50-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06SX53
Sfl-51-1 to Sfl-51-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Y
Sso-1-1 to Sso-1-540	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i>	
Sso-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i>	1DT-1
Sco-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Siccibacter colletis</i>	
Stu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Siccibacter turicensis</i>	LMG 23730
Tgu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Trabulsiella guamensis</i>	ATCC 49490
Tod-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Trabulsiella odontotermitis</i>	
Yre-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yokenella regensburgei</i>	ATCC 49455
Eam-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia amylovora</i>	NBRC 12687
Ebi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia billingiae</i>	
Ein-1-1 to Ein-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia iniecta</i>	
Ema-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia mallotivora</i>	
Eol-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia oleae</i>	
Esp-55-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia</i>	sp. 9145
Etr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia tracheiphila</i>	
Ety-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia typographi</i>	
Pag-1-1 to Pag-1-6	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	<i>Pantoea agglomerans</i> group <i>Pantoea agglomerans</i>
Pag-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	<i>Pantoea agglomerans</i> group <i>Pantoea agglomerans</i> Eh318
Pan-1-1 to Pan-1-5	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea ananatis</i>	
Pan-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea ananatis</i>	BD442
Pan-3-1 to Pan-3-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea ananatis</i>	LMG 2665
Pan-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea ananatis</i>	Sd-1
Pan-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea anthophila</i>	
Pro-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea rodasii</i>	
Prw-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea ruandensis</i>	
Pse-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea septica</i>	
Psp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	sp. 3.5.1
Psp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	sp. 9140
Psp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	sp. BL1
Psp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	sp. CFSAN033090
Psp-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	sp. IMH
Psp-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	sp. MBLJ3
Psp-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	sp. NGS-ED-1003
Psp-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	sp. PSNIH1
Psp-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	sp. PSNIH2
Psp-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	sp. RIT-PI-b
Psp-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	sp. SM3
Pst-1-1 to Pst-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea stewartii</i>	

Pva-1-1 to Pva-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea vagans</i>
Pfl-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Phaseolibacter flectens</i> ATCC 12775
Tmo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Tatumella morbirosei</i>
Tpt-1-1 to Tpt-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Tatumella ptyseos</i> ATCC 33301
Tsa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Tatumella saanichensis</i>
Tsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Tatumella</i> sp. UCD-D_suzukii
Ean-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella anguillarum</i> ET070829
Ean-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella anguillarum</i> ET080729
Ean-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella anguillarum</i> ET080813
Ean-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella anguillarum</i> ET081126R
Eho-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella hoshinae</i> NBRC 105699 = ATCC 33379
Eic-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella ictaluri</i> ATCC 33202
Epi-1-1 to Epi-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella piscicida</i>
Esp-56-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella</i> sp. EA181011
Eta-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella tarda</i>
Eta-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella tarda</i> ATCC 15947 = NBRC 105688
Eta-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella tarda</i> DT
Hal-1-1 to Hal-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Hafnia alvei</i>
Hal-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Hafnia alvei</i> ATCC 13337
Hal-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Hafnia alvei</i> FB1
Hpa-1-1 to Hpa-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Hafnia paralvei</i>
Aen-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Arsenophonus endosymbiont</i> str. Hangzhou of <i>Nilaparvata lugens</i>
Ana-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Arsenophonus nasoniae</i> DSM 15247
Mwi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Moellerella wisconsensis</i>
Mmo-1-1 to Mmo-1-8	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Morganella morgani</i>
Mmo-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Morganella morgani</i> F675
Mmo-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Morganella morgani</i> H1r
Mmo-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Morganella morgani</i> IS15
Msp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Morganella</i> sp. EGD-HP17
Pas-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Photorhabdus asymbiotica</i> subsp. <i>australis</i> DSM 17609
Plu-1-1 to Plu-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Photorhabdus luminescens</i>
Plu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Photorhabdus luminescens</i> BA1
Plu-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Photorhabdus luminescens</i> NBII H75HRPL105
Plu-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Photorhabdus luminescens</i> NBII HiPL101
Plu-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Photorhabdus luminescens</i> subsp. <i>luminescens</i>
Pte-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Photorhabdus temperata</i> subsp. <i>khanii</i> NC19
Pte-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Photorhabdus temperata</i> subsp. <i>temperata</i> Meg1
Pte-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Photorhabdus temperata</i> subsp. <i>thracensis</i>
Pmi-1-1 to Pmi-1-6	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Proteus mirabilis</i>
Pvu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Proteus vulgaris</i>
Pal-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Providencia alcalifaciens</i> 205/92
Pal-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Providencia alcalifaciens</i> F90-2004
Pal-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Providencia alcalifaciens</i> PAL-1
Pal-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Providencia alcalifaciens</i> PAL-2
Pal-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Providencia alcalifaciens</i> PAL-3
Pal-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Providencia alcalifaciens</i> R90-1475
Pal-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Providencia alcalifaciens</i> RIMD 1656011
Pre-1-1 to Pre-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Providencia rettgeri</i>
Pst-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Providencia stuartii</i>
Xbo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus bovienii</i>
Xbo-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus bovienii</i> str. <i>feltiae</i> Florida
Xbo-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus bovienii</i> str. <i>feltiae</i> France
Xbo-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus bovienii</i> str. <i>feltiae</i> Moldova
Xbo-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus bovienii</i> str. Intermedium
Xbo-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus bovienii</i> str. Jollieti
Xbo-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus bovienii</i> str. <i>kraussei</i> Becker Underwood
Xbo-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus bovienii</i> str. <i>kraussei</i> Quebec
Xbo-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus bovienii</i> str. <i>oregonense</i>
Xbo-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus bovienii</i> str. <i>puntauvense</i>
Xca-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus cabanillasii</i> JM26
Xdo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus doucetiae</i>
Xgr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus griffiniae</i>
Xkh-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus khoisanae</i>
Xne-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus nematophila</i>
Xne-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus nematophila</i> AN6/1

Xpo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus poinarii</i> G6
Xsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus</i> sp. NBAII XenSa04
Xsz-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Xenorhabdus szentirmaii</i> DSM 16338
Bgo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Brenneria goodwinii</i>
Dch-1-1 to Dch-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya chrysanthemi</i>
Dch-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya chrysanthemi</i> NCPPB 3533
Dch-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya chrysanthemi</i> NCPPB 402
Dch-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya chrysanthemi</i> NCPPB 516
Dda-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya dadantii</i> NCPPB 3537
Dda-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya dadantii</i> NCPPB 898
Dda-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya dadantii</i> subsp. <i>dieffenbachiae</i> NCPPB 2976
Ddi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya dianthicola</i> IPO 980
Ddi-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya dianthicola</i> RNS04.9
Dso-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya solani</i>
Dsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya</i> sp. 2B12
Dsp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya</i> sp. B16
Dsp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya</i> sp. DW 0440
Dsp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya</i> sp. MK7
Dsp-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya</i> sp. NCPPB 3274
Dsp-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya</i> sp. S1
Dze-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya zeae</i> CSL RW192
Dze-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya zeae</i> DZ2Q
Dze-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya zeae</i> EC1
Dze-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya zeae</i> MK19
Dze-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya zeae</i> NCPPB 2538
Dze-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya zeae</i> NCPPB 3531
Lqu-1-1 to Lqu-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Lonsdalea quercina</i> subsp. <i>quercina</i>
Pat-1-1 to Pat-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium atrosepticum</i>
Pat-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium atrosepticum</i> CFBP 6276
Pat-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium atrosepticum</i> ICMP 1526
Pbe-1-1 to Pbe-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium betavasculorum</i>
Pca-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i>
Pca-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>actinidiae</i>
Pca-3-1 to Pca-3-15	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>brasiliense</i>
Pca-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>brasiliensis</i> ICMP 19477
Pca-5-1 to Pca-5-10	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>carotovorum</i>
Pca-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>carotovorum</i> ICMP 5702
Pca-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>carotovorum</i> UGC32
Pca-8-1 to Pca-8-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>odoriferum</i>
Ppa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium parmentieri</i>
Ppa-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium parmentieri</i> CFIA1002
Ppo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium polaris</i>
Pwa-1-1 to Pwa-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium wasabiae</i>
CSo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Sodalis Candidatus</i> Sodalis pierantonius str. SOPE
Spr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Sodalis praecaptivus</i>
Pur-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	unclassified	Enterobacteriales <i>Phytobacter ursingii</i>
Cmu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Chania multitudinisentens</i> RB-25
Rch-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Rouxiiella chamberiensis</i>
Sfo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia fonticola</i>
Sfo-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia fonticola</i> LMG 7882
Sfo-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia fonticola</i> UTAD54
Sgr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia grimesii</i>
Sli-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia liquefaciens</i>
Sli-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia liquefaciens</i> FK01
Sma-1-1 to Sma-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i>
Sma-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> AB42556419-isolate1
Sma-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> BIDMC 44
Sma-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> BIDMC 50
Sma-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> BIDMC 80
Sma-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> BIDMC 81
Sma-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> H1q
Sma-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> LCT-SM166
Sma-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> LCT-SM262
Sma-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> MC458
Sma-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> MC459

Sma-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> MC460
Sma-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> MC6000
Sma-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> MC6001
Sma-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> MC620
Sma-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> PH1a
Sma-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> SM39
Sma-18-1 to Sma-18-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> subsp. <i>marcescens</i>
Sma-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> subsp. <i>marcescens</i> ATCC 13880
Sma-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> subsp. <i>marcescens</i> Db11
Sne-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia nematodiphila</i> DZ0503SBS1
Spl-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia plymuthica</i> RVH1
Ssp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. 506_PEND
Ssp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. Ag1
Ssp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. Ag2
Ssp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. DD3
Ssp-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. FS14
Ssp-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. H1n
Ssp-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. H1w
Ssp-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. SCBI
Ssp-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. TEL
Ssy-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia symbiotica</i>
Sur-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia urelytica</i>
Yal-1-1 to Yal-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia aldovae</i>
Yal-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia aldovae</i> 670-83
Yal-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia aleksiciae</i>
Ybe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia bercovieri</i>
Yen-1-1 to Yen-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i>
Yen-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i> (type O:2) str. YE3094/96
Yen-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i> (type O:5) str. YE53/03
Yen-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i> (type O:9) str. YE56/03
Yen-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> 556/8265
Yen-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> 647/5307
Yen-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> YO527
Yfr-1-1 to Yfr-1-17	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia frederiksenii</i>
Yfr-2-1 to Yfr-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia frederiksenii</i> ATCC 33641
Yfr-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia frederiksenii</i> Y225
Yin-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia intermedia</i>
Ykr-1-1 to Ykr-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia kristensenii</i>
Yma-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia massiliensis</i>
Yma-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia massiliensis</i> CCUG 53443
Ymo-1-1 to Ymo-1-7	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia mollaretii</i>
Ynu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia nurmii</i>
Ype-1-1 to Ype-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pekkanenii</i>
Ype-2-1 to Ype-2-9	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>
Ype-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 1045
Ype-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 12
Ype-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 1412
Ype-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 1413
Ype-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 14735
Ype-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 1522
Ype-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 164
Ype-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 1670
Ype-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 2
Ype-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 2944
Ype-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 3067
Ype-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 34008
Ype-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 34202
Ype-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 351001
Ype-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 3770
Ype-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 42095
Ype-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 5
Ype-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 620024
Ype-21-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 71021
Ype-22-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 710317
Ype-23-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 7338

Ype-80-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	I1969003
Ype-81-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	I1970005
Ype-82-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	I1991001
Ype-83-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	I1994006
Ype-84-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	I2001001
Ype-85-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	J1963002
Ype-86-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	J1978002
Ype-87-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	K21985002
Ype-88-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	M0000002
Ype-89-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	MGJZ12
Ype-90-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	MGJZ3
Ype-91-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	MGJZ6
Ype-92-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	MGJZ7
Ype-93-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	MGJZ9
Ype-94-1 to Ype-94-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	Pestoides F
Ype-95-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	Pestoides G
Ype-96-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	SHAN11
Ype-97-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	SHAN12
Ype-113-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	str. Pestoides B
Ype-114-1 to Ype-114-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	subsp. <i>microtus</i> bv. Ulegeica
Ype-115-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	subsp. <i>pestis</i> bv. Orientalis
Ype-98-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	YN1065
Ype-99-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	YN1683
Ype-100-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	YN2179
Ype-101-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	YN2588
Ype-102-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	YN472
Ype-103-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>	YN663
Yps-1-1 to Yps-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	
Yps-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	B-6796
Yps-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	B-6862
Yps-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	B-6863
Yps-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	B-6864
Yps-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	B-6865
Yps-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	B-6866
Yps-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	B-7194
Yps-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	B-7195
Yps-10-1 to Yps-10-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	IP 32953
Yps-11-1 to Yps-11-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	PB1/+
Yps-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	str. PA3606
Yps-12-1 to Yps-12-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>	YPIII
Yro-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia rohdei</i>	
Yru-1-1 to Yru-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia ruckeri</i>	
Yru-2-1 to Yru-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia ruckeri</i>	ATCC 29473
Ysi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia similis</i>	
Ywa-1-1 to Ywa-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia wautersii</i>	
CRe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	aphid secondary symbionts	<i>Candidatus</i> Regiella insecticola LSR1
CRe-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	aphid secondary symbionts	<i>Candidatus</i> Regiella insecticola R5.15
Bsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Brenneria</i> sp.	EniD312
Cda-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cedecea davisae</i>	DSM 4568
Cfr-1-1 to Cfr-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i>
Cfr-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i>
							4.7.47CFAA
Cfr-2-1 to Cfr-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i> ATCC
							8090 = MTCC 1658
Cfr-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i> GTC
							09479
Cfr-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i> GTC
							09629
Cko-1-1 to Cko-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter koseri</i>	
Cko-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter koseri</i>	ATCC BAA-895
Cro-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter rodentium</i>	ICC168
Csp-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter</i> sp.	30.2
Csp-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter</i> sp.	A1

Csp-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter sp.</i> KTE151
Csp-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter sp.</i> KTE30
Csp-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter sp.</i> KTE32
Csp-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter sp.</i> L17
Cyo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter youngae</i> ATCC 29220
Cco-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter condimenti</i> 1330
Cdu-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter dublinensis</i> 1210
Cdu-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter dublinensis</i> 582
Cma-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter malonaticus</i> 507
Cma-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter malonaticus</i> 681
Csa-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> 680
Csa-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> 696
Csa-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> 701
Csa-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> ATCC BAA-894
Csa-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> CMCC 45402
Csa-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> E899
Csa-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> ES15
Csa-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> SP291
Ctu-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter turicensis</i> 564
Ctu-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter turicensis</i> z3032
Cun-1-1 to Cun-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter universalis</i> NCTC 9529
Dda-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya dadantii</i> 3937
Dda-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya dadantii</i> Ech586
Ddi-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya dianthicola</i> GBBC 2039
DDi-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya dianthicola</i> NCPPB 3534
Ddi-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya dianthicola</i> NCPPB 453
Dpa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya paradisiaca</i> NCPPB 2511
Dso-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya solani</i> GBBC 2040
Dso-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya solani</i> IPO 2222
Dso-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya solani</i> MK10
Dso-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya solani</i> MK16
Dso-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya solani</i> RNS 08.23.3.1.A
Dsp-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya sp.</i> CSL RW240
Dsp-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya sp.</i> D s0432-1
Dsp-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya sp.</i> NCPPB 569
Dze-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya zeae</i> MS1
Dze-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya zeae</i> NCPPB 3532
Dze-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya zeae</i> ZJU1202
Eic-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Edwardsiella ictaluri</i> 93-146
Eta-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Edwardsiella tarda</i> ATCC 23685
Eta-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Edwardsiella tarda</i> C07-087
Eta-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Edwardsiella tarda</i> EIB202
Eta-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Edwardsiella tarda</i> FL6-60
Eta-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Edwardsiella tarda</i> NBRC 105688
Eae-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter aerogenes</i> EA1509E
Eae-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter aerogenes</i> FGI35
Eae-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter aerogenes</i> KCTC 2190
Eca-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter cancerogenus</i> ATCC 35316
Eas-1-1 to Eas-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter cloacae</i> complex <i>Enterobacter asburiae</i>
Eas-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter cloacae</i> complex <i>Enterobacter asburiae</i> LF7a
Ecl-1-1 to Ecl-1-12	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter cloacae</i> complex <i>Enterobacter cloacae</i>
Ecl-55-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter cloacae</i> complex <i>Enterobacter cloacae</i> BWH
Ecl-56-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter cloacae</i> complex <i>Enterobacter cloacae</i> BWH
Ecl-57-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter cloacae</i> complex <i>Enterobacter cloacae</i>
Ecl-58-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter cloacae</i> complex <i>Enterobacter cloacae</i>
Ecl-59-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter cloacae</i> complex <i>Enterobacter cloacae</i> S611
Ecl-60-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter cloacae</i> complex <i>Enterobacter cloacae</i> SCF1
Ecl-66-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter cloacae</i> complex <i>Enterobacter cloacae str.</i>

Hanford

Ksp-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella sp.</i> MS 92-3
Ksp-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella sp.</i> OBRC7
Kva-1-1 to Kva-1-7	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella variicola</i>
Kva-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella variicola</i> At-22
Era-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Kosakonia <i>Enterobacter radicincitans</i> DSM 16656
Ksa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kosakonia sacchari</i> SP1
Mmo-1-1 to Mmo-1-8	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Morganella morganii</i>
Mmo-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Morganella morganii</i> SC01
Mmo-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Morganella morganii subsp. morganii</i> KT
Pag-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea agglomerans</i> 299R
Pag-1-1 to Pag-1-6	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea</i> <i>Pantoea agglomerans</i> group <i>Pantoea agglomerans</i>
Pag-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea agglomerans</i> IG1
Pag-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea agglomerans</i> Tx10
Pan-1-1 to Pan-1-5	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea ananatis</i>
Pan-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea ananatis</i> AJ13355
Pan-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea ananatis</i> BRT175
Pan-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea ananatis</i> LMG 20103
Pan-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea ananatis</i> LMG 5342
Pan-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea ananatis</i> PA13
Pdi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea dispersa</i> EGD-AAK13
Psp-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> A4
Psp-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> aB
Psp-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> AS-PWVM4
Psp-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> At-9b
Psp-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> GM01
Psp-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> Sc1
Psp-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> SL1.M5
Psp-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> YR343
Pst-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea stewartii subsp. indologenes</i>
Pst-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea stewartii subsp. stewartii</i> DC283
Pva-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea vagans</i> C9-1
Pat-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium atrosepticum</i> SCRI1043
Pca-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium carotovorum subsp. brasiliensis</i> PBR1692
Pca-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium carotovorum subsp. carotovorum</i> PC1
Pca-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium carotovorum subsp. carotovorum</i> PCC21
Pca-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium carotovorum subsp. carotovorum</i> WPP14
Psp-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium sp.</i> SCC3193
Pwa-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium wasabiae</i> CFBP 3304
Pwa-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium wasabiae</i> WPP163
Pas-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Photorhabdus asymbiotica</i>
Plu-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Photorhabdus luminescens subsp. laumondii</i> TTO1
Pte-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Photorhabdus temperata</i> J3
Pte-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Photorhabdus temperata subsp. temperata</i> M1021
Pst-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Plautia stali symbiont</i>
Pha-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus hauseri</i> Zmd44
Pmi-1-1 to Pmi-1-6	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i>
Pmi-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> ATCC 29906
Pmi-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> BB2000
Pmi-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> C05028
Pmi-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> HI4320
Pmi-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> PR03
Pmi-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> WGLW4
Pmi-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> WGLW6
Pal-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia alcalifaciens</i> Dmel2
Pal-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia alcalifaciens</i> DSM 30120
Pbu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia burhodogranariae</i> DSM 19968
Pre-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia rettgeri</i> Dmel1
Pru-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia rustigianii</i> DSM 4541
Pst-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia stuartii</i> ATCC 25827
Pst-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia stuartii</i> MRSN 2154
Ror-4-1 to Ror-4-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella ormithinolytica</i> B6
Rpl-1-1 to Rpl-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella planticola</i>
Sbo-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella bongori</i> N268-08
Sbo-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella bongori</i> NCTC 12419
Sen-2-1 to Sen-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica</i>

Sen-975-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM11
Sen-976-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM12
Sen-977-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM2
Sen-978-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM3
Sen-979-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM4
Sen-980-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM5
Sen-981-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM6
Sen-982-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM7
Sen-983-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM8
Sen-984-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM9
Sen-985-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. T000240
Sen-986-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. TN061786
Sen-987-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. U288
Sen-988-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. UK-1
Sen-989-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. USDA-ARS-USMARC-1899
Sen-990-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium var. 5- str. CFSAN001921
Sen-991-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium var. 5- str. CFSAN004345
Sen-992-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium var. Copenhagen str. 0084
Sen-993-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Uganda str. R8-3404
Sen-994-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Urbana str. ATCC 9261
Sen-995-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Worthington str. ATCC 9607
Sen-996-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Agona <i>Salmonella enterica subsp. enterica serovar</i> Agona str. SL483
Sen-997-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Choleraesuis str. SCSA50
Sen-998-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Choleraesuis str. SCSA50
Sen-999-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Dublin str. CT_02021853
Sen-1000-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Gallinarum/pullorum str. RKS5078
Sen-1001-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Gallinarum/pullorum str. RKS5078
Sen-1001-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Gallinarum str. 287/91
Sen-1002-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Hadar str. RI_05P066
Sen-1003-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Heidelberg str. B182
Sen-1004-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Heidelberg str. SL476
Sen-1005-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Heidelberg str. SL486
Sen-1006-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Kentucky str. CDC 191
Sen-265-1 to Sen-265-2	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Kentucky str. CVM29188
Sen-1007-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Newport str. SL254
Sen-1008-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Newport str. SL317
	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Paratyphi B str. SPB7

Sen-1009-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. entericaserovar Saintpaul <i>Salmonella enterica subsp. enterica serovar Saintpaul str. SARA23</i>
Sen-1010-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. entericaserovar Saintpaul <i>Salmonella enterica subsp. enterica serovar Saintpaul str. SARA29</i>
Sen-1011-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. entericaserovar Typhi <i>Salmonella enterica subsp. enterica serovar Typhi str. CT18</i>
Sen-1012-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. entericaserovar Typhi <i>Salmonella enterica subsp. enterica serovar Typhi str. E00-7866</i>
Sen-1013-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. entericaserovar Typhi <i>Salmonella enterica subsp. enterica serovar Typhi str. Ty2</i>
Sen-1014-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. entericaserovar Typhimurium <i>Salmonella enterica subsp. enterica serovar Typhimurium str. LT2</i>
Sen-1015-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. entericaserovar Virchow <i>Salmonella enterica subsp. enterica serovar Virchow str. SL491</i>
Sen-1016-1 to Sen-1016-3	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. houtenae</i>
Sen-1017-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. houtenae serovar 16:z4,z32:- str. RKS3027</i>
Sen-1018-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. houtenae serovar 50:g,z51:- str. 01-0133</i>
Sen-1019-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. houtenae str. ATCC BAA-1581</i>
Sen-1020-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. indica serovar 6,14,25:z10:1,(2),7 str. 1121</i>
Sen-1021-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. salamae serovar 58:l,z13,z28:z6 str. 00-0163</i>
Sen-1022-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. salamae str. 3588/07</i>
Sfo-4-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia fonticola AU-AP2C</i>
Sli-3-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia liquefaciens ATCC 27592</i>
Sma-1-1 to Sma-1-4	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens</i>
Sma-21-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens EGD-HP20</i>
Sma-22-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens FGI94</i>
Sma-23-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens LCT-SM213</i>
Sma-24-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens VGH107</i>
Sma-25-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens W2.3</i>
Sma-26-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens WW4</i>
Sod-1-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia odorifera DSM 4582</i>
Spl-2-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia plymuthica 4Rx13</i>
Spl-3-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia plymuthica A30</i>
Spl-4-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia plymuthica AS9</i>
Spl-5-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia plymuthica PRI-2C</i>
Spl-6-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia plymuthica S13</i>
Spr-2-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia proteamaculans 568</i>
Ssp-10-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia sp. AS12</i>
Ssp-11-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia sp. AS13</i>
Ssp-12-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia sp. ATCC 39006</i>
Ssp-13-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia sp. M24T3</i>
Ssp-14-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia sp. S4</i>
Ssy-2-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia Serratia symbiotica str. Tucson</i>
Sbo-2-1 to Sbo-2-10	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii</i>
Sbo-5-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 08-0009</i>
Sbo-6-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 08-0280</i>
Sbo-7-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 08-2671</i>
Sbo-8-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 08-2675</i>
Sbo-9-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 08-6341</i>
Sbo-10-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 09-0344</i>
Sbo-11-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 248-1B</i>
Sbo-12-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 4444-74</i>
Sbo-13-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 5216-82</i>
Sbo-14-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii ATCC 9905</i>
Sbo-15-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii CDC 3083-94</i>
Sbo-16-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii S6614</i>
Sbo-17-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii S7334</i>
Sbo-18-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii Sb227</i>
Sdy-3-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella dysenteriae 1012</i>
Sdy-4-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella dysenteriae 225-75</i>
Sdy-5-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella dysenteriae 4</i>
Sdy-6-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella dysenteriae CDC 74-1112</i>

Sdy-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella dysenteriae</i> S6554
Sdy-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella dysenteriae</i> Sd197
Sdy-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella dysenteriae</i> WRSd3
Sdy-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella dysenteriae</i> WRSd5
Sfl-1-1 to Sfl-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>
Sfl-52-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2001020
Sfl-53-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2002017
Sfl-54-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2002028
Sfl-55-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2002106
Sfl-56-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2003035
Sfl-57-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2003036
Sfl-58-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2005002
Sfl-59-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2005025
Sfl-60-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2005184
Sfl-61-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2930-71
Sfl-25-1 to Sfl-25-14	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2a
Sfl-62-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2a str. 2457T
Sfl-63-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2a str. 301
Sfl-64-1 to Sfl-64-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 3a
Sfl-65-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 4343-70
Sfl-66-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 5 str. 8401
Sfl-67-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 51581
Sfl-68-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 5a str. M90T
Sfl-69-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 6
Sfl-70-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> CCH060
Sfl-71-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> CDC 796-83
Sfl-72-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> G1663
Sfl-73-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> MT1457
Sfl-74-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S5644
Sfl-75-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S5717
Sfl-76-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S6162
Sfl-77-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S6585
Sfl-78-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S6678
Sfl-79-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S6764
Sfl-80-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S7737
Sfl-81-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> Shi06GS02
Sfl-82-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> Shi06HNO06
Sfl-83-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> Shi06HN344
Sfl-84-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> Shi06HN347
Sfl-85-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> VA-6
Sfl-51-1 to Sfl-51-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> Y
Sso-1-1 to Sso-1-540	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i>
Sso-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 08-7761
Sso-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 08-7765
Sso-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 09-1032
Sso-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 09-2245
Sso-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 09-4962
Sso-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 3233-85
Sso-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 4822-66
Sso-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 53G
Sso-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> S6513
Sso-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> Ss046
Sso-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> str. Moseley
Ssp-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella</i> sp. D9
Sbl-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shimwellia blattae</i> DSM 4481 = NBRC 105725
Sgl-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Sodalis glossinidius</i> str. 'morsitans'
Xbo-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Xenorhabdus bovienii</i> SS-2004
Xne-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Xenorhabdus nematophila</i> ATCC 19061
Xne-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Xenorhabdus nematophila</i> F1
Xne-5-1 to Xne-5-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Xenorhabdus nematophila</i> str. Anatoliense
Xne-6-1 to Xne-6-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Xenorhabdus nematophila</i> str. Websteri
Yal-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia aldovae</i> ATCC 35236
Ybe-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia bercovieri</i> ATCC 43970
Yen-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> (type O:3) str. YE12/03
Yen-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> (type O:5,27) str. YE149/02

Yen-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> (type O:9) str. YE212/02
Yen-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> IP 10393
Yen-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> IP2222
Yen-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> NFO
Yen-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>enterocolitica</i> 8081
Yen-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>enterocolitica</i> WA-314
Yen-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> 105.5R(r)
Yen-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> PhRBD_Ye1
Yen-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> Y11
Yen-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> YE-149
Yen-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> YE-150
Yen-21-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> YE-P1
Yen-22-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> YE-P4
Yfr-2-1 to Yfr-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia frederiksenii</i> ATCC 33641
Yin-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia intermedia</i> ATCC 29909
Ykr-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia kristensenii</i> ATCC 33638
Ymo-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia mollaretii</i> ATCC 43969
Ype-116-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 113
Ype-117-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 2330
Ype-118-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 2501
Ype-119-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 2504
Ype-120-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 2506
Ype-121-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 30017
Ype-122-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 42013
Ype-123-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 42091
Ype-124-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 5761
Ype-125-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 7
Ype-126-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 735
Ype-127-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 780441
Ype-128-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 91
Ype-29-1 to Ype-29-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> A1122
Ype-129-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> A1956001
Ype-31-1 to Ype-31-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> Angola
Ype-32-1 to Ype-32-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> Antiqua
Ype-217-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> biovar Antiqua str. B42003004
Ype-218-1 to Ype-218-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> biovar Antiqua str. E1979001
Ype-219-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> biovar Antiqua str. UG05-0454
Ype-220-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> biovar Mediaevalis str. K1973002
Ype-221-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> biovar Mediaevalis str. Harbin 35
Ype-222-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> biovar Microtus str. 91001
Ype-223-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> biovar Orientalis str. F1991016
Ype-225-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> biovar Orientalis str. India 195
Ype-224-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> biovar Orientalis str. IP275
Ype-226-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> biovar Orientalis str. MG05-1020
Ype-227-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> biovar Orientalis str. PEXU2
Ype-130-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> C1976001
Ype-131-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> C1989001
Ype-132-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CA88-4125
Ype-133-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC125002
Ype-134-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC348002
Ype-135-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC49003
Ype-136-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC64001
Ype-137-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC8211
Ype-138-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC87001
Ype-139-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC91090
Ype-140-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC93014
Ype-141-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC96001
Ype-142-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CO92
Ype-143-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> D106004
Ype-144-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> D182038
Ype-145-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> D1982001
Ype-146-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> G1996006
Ype-147-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> G1996010
Ype-148-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> G8786
Ype-149-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> H1959004

Ype-213-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> PY-99	
Ype-215-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> YN2551	
Ype-216-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> Z176003	
Yps-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pseudotuberculosis</i> IP 31758	
Yps-10-1 to Yps-10-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pseudotuberculosis</i> IP 32953	
Yps-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pseudotuberculosis</i> NBRC 105692	
Yps-11-1 to Yps-11-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pseudotuberculosis</i> PB1/+	
Yps-12-1 to Yps-12-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pseudotuberculosis</i> YPIII	
Yro-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia rohdei</i> ATCC 43380	
Yru-1-1 to Yru-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia ruckeri</i>	
Yru-2-1 to Yru-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia ruckeri</i> ATCC 29473	
Yre-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yokenella regensburgi</i> ATCC 43003	
gpr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	gamma	proteobacterium	WG36	
CSc-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Orbales	Orbaceae	<i>Candidatus Schmidhempelia bombi</i> str. Bimp	
Fpe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Orbales	Orbaceae	<i>Frischella perrara</i>	
Gap-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Orbales	Orbaceae	<i>Gilliamella apicola</i>	
Asu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus succinogenes</i> 130Z	
Aap-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter aphrophilus</i>	
Aap-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter aphrophilus</i> ATCC 33389	
Aap-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter aphrophilus</i> F0387	
Aap-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter aphrophilus</i> NJ8700	
Ase-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter segnis</i> ATCC 33393	
Gan-1-1 to Gan-1-12	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Gallibacterium anatis</i>	
Gan-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Gallibacterium anatis</i> 10672-6	
Gan-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Gallibacterium anatis</i> 12656/12	
Gan-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Gallibacterium anatis</i> 4895	
Gan-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Gallibacterium anatis</i> 7990	
Gan-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Gallibacterium anatis</i> CCM5995	
Gan-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Gallibacterium anatis</i> DSM 16844 = F 149	
Gan-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Gallibacterium anatis</i> IPDH697-78	
Gan-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Gallibacterium anatis</i> str. Avicor	
Gan-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Gallibacterium anatis</i> UMN179	
Gge-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Gallibacterium genomosp.</i> 1	
Gge-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Gallibacterium genomosp.</i> 2	
Hha-1-1 to Hha-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus haemolyticus</i>	
Hha-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus haemolyticus</i> M21127	
Hha-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus haemolyticus</i> M21621	
Hin-1-1 to Hin-1-6	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i>	
Hin-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> 2019	
Hin-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> 3655	
Hin-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> 60294N1	
Hin-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> 7P49H1	
Hin-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> PittII	
Hin-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> R2866	
Hpa-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus parainfluenzae</i> ATCC 33392	
Hsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus sp. oral taxon</i> 851 str. F0397	
Mma-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Mannheimia massilioguelmaensis</i>	
Vpa-1-1 to Vpa-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio parahaemolyticus</i>	
Sen-1023-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Salmonella Salmonella enterica subsp. entericaserovar Tennessee <i>Salmonella enterica subsp. enterica serovar</i> Tennessee str	
Sen-1024-1 to Sen-1024-2	CVM19633	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i> Schwarzengrund str
Sen-1025-1	CVM23701	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Salmonella Salmonella enterica subsp. entericaserovar 4,[5],12:i:- <i>Salmonella enterica subsp. enterica serovar</i> 4,[5],12:i:- str
Sen-1026-1	GA_MM04042433	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i> Javiana str
Sen-1027-1	HLN05-537	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Salmonella Salmonella enterica subsp. entericaserovar Weltevreden <i>Salmonella enterica subsp. enterica serovar</i> Weltevreden str
Sen-1028-1	P125109	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Salmonella Salmonella enterica subsp. entericaserovar Enteritidis <i>Salmonella enterica subsp. enterica serovar</i> Enteritidis str
Sen-1029-1	RKS4594	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Salmonella Salmonella enterica subsp. entericaserovar Paratyphi C <i>Salmonella enterica subsp. enterica serovar</i> Paratyphi C strain

Sen-1030-1	SC-B67Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. entericaserovar Choleraesuis <i>Salmonella enterica subsp. enterica serovar Choleraesuis</i> str
Sen-1024-1 to Sen-1024-2 env-1 to env-370	SL480Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar Schwarzengrund</i> str environmental samples

8.2 Multiple-sequence alignment

Each L25-Gammaproteobacteria RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 8.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The L25-Gammaproteobacteria RNA itself is denoted by the line underneath marked 5’ and 3’ on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded green. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-

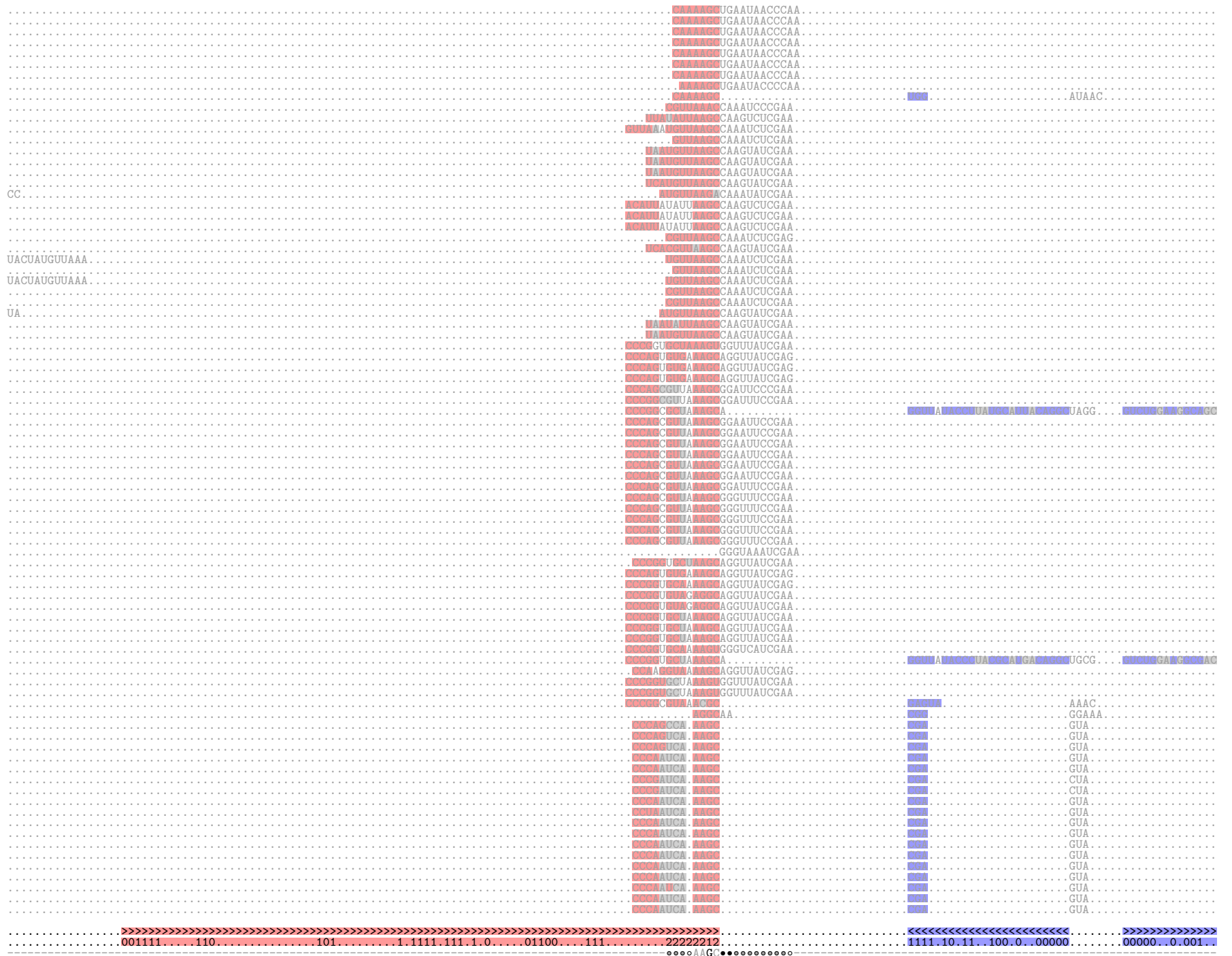
Crick or G-U pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, red nucleotides: nucleotide identity conserved more than 97% of the time, black nucleotides: 90%, gray nucleotides: 75%, red circle (◉): nucleotide is present 97% of the time, black circle (◐): 90%, gray circle (◑): 75%, white circle (◒): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Aap-1-1, Aap-2-1, Aap-3-1, Aap-4-1, Ase-1-1, CRe-1-1, Cam-1-1, Cam-1-2, Cam-1-3, Cbr-1-1, Cbr-1-2, Cbr-1-3, Cbr-1-4, Cbr-1-6, Cdu-1-1, Cdu-4-1, Cdu-5-1, Cfr-1-1, Cfr-1-2, Cfr-1-3, Cfr-10-1, Cfr-11-1, Cfr-2-1, Cfr-2-2, Cfr-3-1, Cfr-5-1, Cfr-6-1, Cfr-7-1, Cfr-8-1, Cfr-9-1, Cko-1-1, Cko-2-1, Cma-1-2, Cma-1-3, Cma-1-4, Cma-2-1, Cma-3-1, Cma-5-1, Cro-1-1, Cro-3-1, Csa-1-1, Csa-11-1, Csa-13-1, Csa-14-1, Csa-16-1, Csa-2-1, Csa-3-1, Csa-4-1, Csa-5-1, Csa-6-1, Csa-8-1, Csa-9-1, Csp-1-1, Csp-10-1, Csp-12-1, Csp-14-1, Csp-15-1, Csp-16-1, Csp-19-1, Csp-2-1, Csp-3-1, Csp-4-1, Csp-5-1, Csp-6-1, Csp-7-1, Csp-8-1, Csp-9-1, Ctu-1-1, Ctu-2-1, Ctu-4-1, Cun-1-2, Cyo-1-1, Dch-1-2, Dch-2-1, Dda-4-1, Ddi-1-1, Ddi-2-1, Ddi-4-1, Dso-1-1, Dso-2-1, Dso-3-1, Dso-5-1, Dso-6-1, Dsp-4-1, Dsp-6-1, Dsp-7-1, Dsp-8-1, Dze-3-1, Eae-1-1, Eae-2-1, Eae-3-1, Eal-1-1, Eal-3-1, Eal-4-1, Eal-5-1, Eam-11-1, Eam-12-1, Eam-13-1, Eam-14-1, Eam-2-1, Eam-3-1, Eam-4-1, Eam-5-1, Eam-6-1, Eam-7-1, Eam-8-1, Eam-9-1, Ean-1-1, Ean-2-1, Ean-3-1, Ean-4-1, Eas-1-1, Eas-1-2, Eas-2-1, Eas-3-1, Eba-1-1, Eba-3-1, Eba-5-1, Eca-2-1, Eca-3-1, Ecl-1-1, Ecl-1-10, Ecl-1-11, Ecl-1-12, Ecl-1-2, Ecl-1-3, Ecl-1-4, Ecl-1-5, Ecl-1-6, Ecl-1-7, Ecl-1-8, Ecl-1-9, Ecl-10-1, Ecl-11-1, Ecl-12-1, Ecl-13-1, Ecl-15-1, Ecl-17-1, Ecl-18-1, Ecl-19-1, Ecl-2-1, Ecl-20-1, Ecl-21-1, Ecl-22-1, Ecl-23-1, Ecl-24-1, Ecl-25-1, Ecl-26-1, Ecl-27-1, Ecl-28-1, Ecl-28-2, Ecl-28-3, Ecl-28-4, Ecl-28-5, Ecl-28-6, Ecl-3-1, Ecl-30-1, Ecl-31-1, Ecl-32-1, Ecl-35-1, Ecl-36-1, Ecl-38-1, Ecl-4-1, Ecl-40-1, Ecl-41-1, Ecl-43-1, Ecl-44-1, Ecl-46-1, Ecl-47-1, Ecl-48-1, Ecl-49-1, Ecl-5-1, Ecl-50-1, Ecl-52-2, Ecl-52-4, Ecl-52-5, Ecl-53-1, Ecl-55-1, Ecl-56-1, Ecl-57-1, Ecl-6-1, Ecl-61-1, Ecl-62-1, Ecl-63-1, Ecl-64-1, Ecl-65-1, Ecl-66-1, Ecl-67-1, Ecl-68-1, Ecl-69-1, Ecl-7-1, Ecl-70-1, Ecl-8-1, Ecl-9-1, Eco-1-1, Eco-1-2, Eco-1-3, Eco-1-4, Eco-10-1, Eco-100-1, Eco-1000-1, Eco-1001-1, Eco-1002-1, Eco-1003-1, Eco-1004-1, Eco-1005-1, Eco-1006-1, Eco-1007-1, Eco-1008-1, Eco-1009-1, Eco-101-1, Eco-1010-1, Eco-1011-1, Eco-1012-1, Eco-1013-1, Eco-1014-1, Eco-1015-1, Eco-1016-1, Eco-1017-1, Eco-1018-1, Eco-1019-1, Eco-102-1, Eco-1020-1, Eco-1021-1, Eco-1021-2, Eco-1021-3, Eco-1022-1, Eco-1023-1, Eco-1024-1, Eco-1025-1, Eco-1026-1, Eco-1027-1, Eco-1028-1, Eco-1029-1, Eco-103-1, Eco-1030-1, Eco-1031-1, Eco-1032-1, Eco-1033-1, Eco-1034-1, Eco-1035-1, Eco-1036-1, Eco-1037-1, Eco-1038-1, Eco-1039-1, Eco-104-1, Eco-1040-1, Eco-1041-1, Eco-1042-1, Eco-1043-1, Eco-1044-1, Eco-1045-1, Eco-1046-1, Eco-1047-1, Eco-1048-1, Eco-1049-1, Eco-105-1, Eco-1050-1, Eco-1051-1, Eco-1052-1, Eco-1053-1, Eco-1054-1, Eco-1055-1, Eco-1056-1, Eco-1057-1, Eco-1058-1, Eco-1059-1, Eco-106-1, Eco-1060-1, Eco-1061-1, Eco-1062-1, Eco-1063-1, Eco-1064-1, Eco-1065-1, Eco-1066-1, Eco-1067-1, Eco-1068-1, Eco-1069-1, Eco-107-1, Eco-1070-1, Eco-1071-1, Eco-1072-1, Eco-1073-1, Eco-1074-1, Eco-1075-1, Eco-1076-1, Eco-1077-1, Eco-1078-1, Eco-1079-1, Eco-108-1, Eco-1080-1, Eco-1081-1, Eco-1082-1, Eco-1083-1, Eco-1085-1, Eco-1086-1, Eco-1087-1, Eco-1088-1, Eco-1089-1, Eco-109-1, Eco-1090-1, Eco-1091-1, Eco-1092-1, Eco-1093-1, Eco-1094-1, Eco-1095-1, Eco-1096-1, Eco-1097-1, Eco-1098-1, Eco-1099-1, Eco-11-1, Eco-110-1, Eco-1100-1, Eco-1101-1, Eco-1102-1, Eco-1103-1, Eco-1103-2, Eco-1104-1, Eco-1105-1,

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Sen-252-1, Sen-253-1, Sen-254-1, Sen-255-1, Sen-256-1, Sen-257-1,

Pca-5-9
Pca-9-1
Pca-8-1
Pca-5-10
Pca-3-15
Pca-7-1
Pca-1-1
Pca-2-1
Pat-3-1
Pte-1-1
Xbo-9-1
Plu-6-1
Plu-2-1
Xne-3-1
Xkh-1-1
Xne-5-1
Xgr-1-1
Xdo-1-1
Xbo-2-1
Xbo-11-1
Xbo-8-1
Pas-1-1
Xpo-1-1
Plu-1-2
Plu-5-1
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Pte-2-1
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Xsz-1-1
Spl-2-1
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Sfo-1-1
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Sma-1-2
Sgr-1-1
Sma-1-3
Sur-1-1
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Sma-14-1
Ssp-8-1
Ssp-9-1
Sne-1-1
Sma-18-1
Sma-25-1
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Sli-2-1
env-161
Ssp-6-1
Ssp-2-1
Ssy-2-1
Ssy-1-1
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Ssp-14-1
Cmu-2-1
Spr-2-1
Ssp-4-1
Spl-1-1
Ssp-10-1
Sod-1-1
Spl-5-1
Ype-132-1
Yfr-1-1
Yfr-1-4
Ymo-1-1
Ymo-1-3
Yfr-1-6
Yfr-1-7
Yen-21-1
Yal-1-1
Yfr-1-9
Ype-1-1
Yfr-1-10
Yfr-2-2
Yfr-1-12
Yal-1-3
Ymo-1-5
Yma-2-1
Yma-1-1



Ama-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Actinomycineae	Actinomycetaceae	<i>Actinomyces massiliensis</i> F0489
Ane-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Actinomycineae	Actinomycetaceae	<i>Actinomyces neuii</i> BVS029A5
Vca-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Actinomycineae	Actinomycetaceae	<i>Varibaculum cambriense</i> DSM 15806
Aha-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Actinopolysporineae	Actinopolysporaceae	<i>Actinopolyspora halophila</i> DSM 43834
Cac-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Catenulisporineae	Catenulisporaceae	<i>Catenulispora acidiphila</i> DSM 44928
Gai-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia aichiensis</i> NBRC 108223
Gal-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia alkanivorans</i> NBRC 16433
Gam-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia amarae</i> NBRC 15530
Gam-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia amicalis</i> NBRC 100051 = JCM 11271
Gar-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia araii</i> NBRC 100433
Gbr-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia bronchialis</i> DSM 43247
Gef-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia effusa</i> NBRC 100432
Ghi-1-1 to Ghi-1-2	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia hirsuta</i> DSM 44140 = NBRC 16056
Gkr-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia kroppenstedtii</i> DSM 45133
Gma-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia malaquae</i> NBRC 108250
Gna-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia namibiensis</i> NBRC 108229
Gne-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia neofelifaecis</i> NRRL B-59395
Got-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia otitidis</i> NBRC 100426
Gpa-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia paraffinivorans</i> NBRC 108238
Gpo-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia polyisoprenivorans</i> HW436
Gpo-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia polyisoprenivorans</i> NBRC 16320
Gpo-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia polyisoprenivorans</i> VH2
Grh-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia rhizosphaera</i> NBRC 16068
Gru-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia rubripertincta</i> NBRC 101908
Gsi-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia sihwensis</i> NBRC 108236
Gso-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia soli</i> NBRC 108243
Gsp-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia sp.</i> KTR9
Gsp-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia sputi</i> NBRC 100414
Gte-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia terrae</i> C-6
Gte-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Gordoniaceae	<i>Gordonia terrae</i> NBRC 100016
Asu-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Amycolicococcus subflavus</i> DQS3-9A1
Mab-1-1 to Mab-1-166	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium abscessus</i>
Mch-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium chubuense</i> NBB4
Mfo-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium fortuitum subsp. fortuitum</i> DSM 46621
Mgi-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium gilvum</i> PYR-GCK
Mgi-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium gilvum</i> Spyr1
Mha-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium hassiacum</i> DSM 44199
Mma-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium massiliense</i> CCUG 48898
Mph-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium phlei</i> RIVM601174
Mrh-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium rhodesiae</i> JS60
Mrh-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium rhodesiae</i> NBB3
Msp-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium sp.</i> 141
Msp-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium sp.</i> 155
Msp-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium sp.</i> 360MFTsu5.1
Msp-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium sp.</i> JDM601
Msp-5-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium sp.</i> JLS
Msp-6-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium sp.</i> KMS
Msp-7-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium sp.</i> MCS
Mth-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium thermoresistibile</i> ATCC 19527
Mva-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium vaccae</i> ATCC 25954
Mva-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium vanbaalenii</i> PYR-1
Mab-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium abscessus</i> <i>Mycobacterium abscessus</i> 3A-0119-R
Mab-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium abscessus</i> 3A-0122-R
Mab-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium abscessus</i> 3A-0122-S
Mab-5-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium abscessus</i> 3A-0731
Mab-6-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Mycobacteriaceae	<i>Mycobacterium abscessus</i> 3A-0810-R

Mav-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Mycobacteriaceae Mycobacterium Mycobacteriumavium complex (MAC) <i>Mycobacterium avium subsp. avium</i> Env 77
Nas-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Nocardia asteroides</i> NBRC 15531
Nbr-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Nocardia brasiliensis</i> ATCC 700358
Ncy-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Nocardia cyriacigeorgica</i> GUH-2
Nfa-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Nocardia farcinica</i> IFM 10152
Nsp-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Nocardia sp.</i> 348MFTsu5.1
Nsp-2-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Nocardia sp.</i> BMG111209
Req-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus equi</i> 103S
Req-2-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus equi</i> ATCC 33707
Req-3-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus equi</i> NBRC 101255 = C 7
Rer-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus erythropolis</i> CCM2595
Rer-2-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus erythropolis</i> DN1
Rer-3-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus erythropolis</i> PR4
Rer-4-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus erythropolis</i> SK121
Rer-5-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus erythropolis</i> XP
Rim-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus imtechensis</i> RKJ300
Rjo-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus jostii</i> RHA1
Rop-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus opacus</i> B4
Rop-2-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus opacus</i> M213
Rop-3-1 to Rop-3-2	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus opacus</i> PD630
Rpy-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus pyridinivorans</i> AK37
Rpy-2-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus pyridinivorans</i> SB3094
Rqi-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus qingshengii</i> BKS 20-40
Rrh-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus rhodnii</i> LMG 5362
Rrh-2-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus rhodochrous</i> BKS6-46
Rru-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus ruber</i> BKS 20-38
Rru-2-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus ruber</i> Chol-4
Rsp-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus sp.</i> 114MFTsu3.1
Rsp-2-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus sp.</i> 29MFTsu3.1
Rsp-3-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus sp.</i> AW25M09
Rsp-4-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus sp.</i> DK17
Rsp-5-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus sp.</i> EsD8
Rsp-6-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus sp.</i> JVH1
Rsp-7-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus sp.</i> P14
Rsp-8-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus sp.</i> P27
Rsp-9-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus sp.</i> R1101
Rtr-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus triatomae</i> BKS 15-14
Rwr-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Rhodococcus uratislaviensis</i> IFP 2016
Sni-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Nocardiaceae <i>Smaragdicoccus niigatensis</i> DSM 44881
Tpa-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Tsukamurellaceae <i>Tsukamurella paurometabola</i> DSM 20162
Wsp-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Corynebacterineae Williamsiaceae <i>Williamsia sp.</i> D3
Ace-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Acidothermaceae <i>Acidothermus cellulolyticus</i> 11B
Fal-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Frankiaceae <i>Frankia alni</i> ACN14a
Fsp-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Frankiaceae <i>Frankia sp.</i> BCU110501
Fsp-2-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Frankiaceae <i>Frankia sp.</i> BMG5.12
Fsp-3-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Frankiaceae <i>Frankia sp.</i> Cc13
Fsp-4-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Frankiaceae <i>Frankia sp.</i> Cc16
Fsp-5-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Frankiaceae <i>Frankia sp.</i> EAN1pec
Fsp-7-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Frankiaceae <i>Frankia sp.</i> Eu1c
Fsp-6-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Frankiaceae <i>Frankia sp.</i> EUN1f
Fsp-8-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Frankiaceae <i>Frankia sp.</i> Iso899
Fsp-9-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Frankiaceae <i>Frankia sp.</i> QA3
Fsy-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Frankiaceae <i>Frankia symbiont of Datisca glomerata</i>
Nmu-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Nakamurellaceae <i>Nakamurella multipartita</i> DSM 44233
Spo-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Frankineae Sporichthyaceae <i>Sporichthya polymorpha</i> DSM 43042
Sna-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Glycomycineae Glycomycetaceae <i>Stackebrandtia nassauensis</i> DSM 44728
Bfa-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Micrococcineae Dermabacteraceae <i>Brachybacterium faecium</i> DSM 4810
Bmu-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Micrococcineae Dermabacteraceae <i>Brachybacterium muris</i> UCD-AY4
Bpa-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Micrococcineae Dermabacteraceae <i>Brachybacterium paraconglomeratum</i> LC44
Bsq-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Micrococcineae Dermabacteraceae <i>Brachybacterium squillarum</i> M-6-3
Dsp-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Micrococcineae Dermabacteraceae <i>Dermabacter sp.</i> HFH0086
Afr-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Micromonosporineae Micromonosporaceae <i>Actinoplanes friuliensis</i> DSM 7358
Agl-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Micromonosporineae Micromonosporaceae <i>Actinoplanes globisporus</i> DSM 43857
Ami-1-1	Bacteria Actinobacteria Actinobacteridae Actinomycetales Micromonosporineae Micromonosporaceae <i>Actinoplanes missouriensis</i> 431

Asp-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Actinoplanes</i> sp. N902-109
Asp-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Actinoplanes</i> sp. SE50/110
Cko-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Catelliglobospora koreensis</i> DSM 44566
Lal-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Longispora albida</i> DSM 44784
Mau-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Micromonospora aurantiaca</i> ATCC 27029
Mlu-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Micromonospora lupini</i> str. Lupac 08
Msp-8-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Micromonospora</i> sp. ATCC 39149
Msp-9-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Micromonospora</i> sp. CNB394
Msp-10-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Micromonospora</i> sp. L5
Sar-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNH877
Sar-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNH962
Sar-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNP105
Sar-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNP193
Sar-5-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNR107
Sar-6-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNS-205
Sar-7-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNS051
Sar-8-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNS673
Sar-9-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNT859
Sar-10-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNX481
Sar-11-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNX814
Sar-12-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNY011
Sar-13-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNY231
Sar-14-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNY234
Sar-15-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNY256
Sar-16-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNY260
Sar-17-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNY280
Sar-18-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> CNY282
Sar-19-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora arenicola</i> DSM 45545
Spa-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNQ768
Spa-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNR942
Spa-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNS055
Spa-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNS860
Spa-5-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNS863
Spa-6-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNS996
Spa-7-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNT045
Spa-8-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNT124
Spa-9-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNT584
Spa-10-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNT609
Spa-11-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNT849
Spa-12-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNT851
Spa-13-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNY237
Spa-14-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> CNY330
Spa-15-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> DSM 45543
Spa-16-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> DSM 45544
Spa-17-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> DSM 45546
Spa-18-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> DSM 45547
Spa-19-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> DSM 45548
Spa-20-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora pacifica</i> DSM 45549
Str-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora tropica</i> CNB-440
Str-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora tropica</i> CNR699
Str-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Salinispora tropica</i> CNS416
Vma-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Micromonosporineae	Micromonosporaceae	<i>Verrucosipora maris</i> AB-18-032
Aal-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Nocardiodaceae	<i>Actinopolymorpha alba</i> DSM 45243
Ama-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Nocardiodaceae	<i>Aeromicrobium marinum</i> DSM 15272
Nba-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Nocardiodaceae	<i>Nocardiodaceae bacterium</i> Broad-1
Nsp-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Nocardiodaceae	<i>Nocardioides</i> sp. Iso805N
Nsp-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Nocardiodaceae	<i>Nocardioides</i> sp. JS614
Pav-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Propionibacteriaceae	<i>Propionibacterium avidum</i> 44067
Pav-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Propionibacteriaceae	<i>Propionibacterium avidum</i> TM16
Psp-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Propionibacteriaceae	<i>Propionibacterium</i> sp. HGH0353
Psp-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Propionibacteriaceae	<i>Propionibacterium</i> sp. KPL1838
Psp-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Propionibacteriaceae	<i>Propionibacterium</i> sp. KPL1852
Psp-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Propionibacteriaceae	<i>Propionibacterium</i> sp. KPL2000
Psp-5-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Propionibacteriaceae	<i>Propionibacterium</i> sp. KPL2005
Ply-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Propionibacterineae	Propionibacteriaceae	<i>Propionimicrobium lymphophilum</i> ACS-093-V-SCH5

Ami-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Actinosynnemataceae	<i>Actinosynnema mirum</i> DSM 43827
Asp-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Actinoalloteichus spitiensis</i> RMV-1378
Aen-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Actinokinetoospora enzanensis</i> DSM 44649
Aaz-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Amycolatopsis azurea</i> DSM 43854
Aba-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Amycolatopsis balhimycina</i> FH 1894
Abe-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Amycolatopsis benzoatilytica</i> AK 16/65
Ade-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Amycolatopsis decaplanina</i> DSM 44594
Ame-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Amycolatopsis mediterranei</i> RB
Ame-2-1 to Ame-2-2	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Amycolatopsis mediterranei</i> S699
Ame-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Amycolatopsis mediterranei</i> U32
Ame-4-1 to Ame-4-2	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Amycolatopsis methanolica</i> 239
Ani-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Amycolatopsis nigrescens</i> CSC17Ta-90
Asp-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Amycolatopsis</i> sp. ATCC 39116
Ava-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Amycolatopsis vancoresmycina</i> DSM 44592
Pdi-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Pseudonocardia diozanivorans</i> CB1190
Psp-6-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Pseudonocardia</i> sp. P1
Saz-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharomonospora azurea</i> NA-128
Saz-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharomonospora azurea</i> SZMC 14600
Scy-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharomonospora cyanea</i> NA-134
Sgl-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharomonospora glauca</i> K62
Sha-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharomonospora halophila</i> 8
Sma-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharomonospora marina</i> XMU15
Ssa-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharomonospora saliphila</i> YIM 90502
Svi-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharomonospora viridis</i> DSM 43017
Sxi-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharomonospora xinjiangensis</i> XJ-54
Ser-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharopolyspora erythraea</i> D
Ser-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharopolyspora erythraea</i> NRRL 2338
Ssp-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharopolyspora spinosa</i> NRRL 18395
Ses-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Saccharothrix espanaensis</i> DSM 44229
Sma-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Pseudonocardineae	Pseudonocardiaaceae	<i>Sciscionella marina</i> DSM 45152
Saf-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces afghaniensis</i> 772
Sal-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces albus</i> J1074
Sav-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces avermitilis</i> MA-4680
Sbi-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces bingchenggensis</i> BCW-1
Sbo-1-1 to Sbo-1-2	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces bottropensis</i> ATCC 25435
Sca-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces canus</i> 299MFChir4.1
Sca-2-1 to Sca-2-2	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces cattleya</i> NRRL 8057 = DSM 46488
Sch-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces chartreusis</i> NRRL 12338
Scl-1-1 to Scl-1-2	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces clavuligerus</i> ATCC 27064
Sco-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces coelicoflavus</i> ZG0656
Sco-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces coelicolor</i> A3(2)
Sco-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces collinus</i> Tu 365
Sda-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces davawensis</i> JCM 4913
Sfl-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces flavogriseus</i> ATCC 33331
Sfu-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces fulvissimus</i> DSM 40593
Sga-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces gancidicus</i> BKS 13-15
Sgh-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces ghanaensis</i> ATCC 14672
Sgl-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces globisporus</i> C-1027
Sgr-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces griseoaurantiacus</i> M045
Sgr-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces griseoflavus</i> Tu4000
Sgr-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces griseus</i> subsp. <i>griseus</i> NBRC 13350
Sgr-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces griseus</i> XylebKG-1
Shy-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces hygrosopicus</i> ATCC 53653
Shy-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces hygrosopicus</i> subsp. <i>jinggangensis</i> 5008
Shy-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces hygrosopicus</i> subsp. <i>jinggangensis</i> TL01
Sip-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces ipomoeae</i> 91-03
Sli-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces lividans</i> 1326
Sli-2-1 to Sli-2-2	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces lividans</i> TK24
Smo-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces mobaraensis</i> NBRC 13819 = DSM 40847
Sni-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces niveus</i> NCIMB 11891
Spr-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces pristinaespiralis</i> ATCC 25486
Spr-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces prunicolor</i> NBRC 13075
Spu-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces purpureus</i> KA281
Sri-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces rimosus</i> subsp. <i>rimosus</i> ATCC 10970
Sro-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces roseochromogenes</i> subsp. <i>oscitans</i> DS 12.976

Sro-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces roseosporus</i> NRRL 15998
Ssc-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces scabiei</i> 87.22
Ssc-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces scabrisporus</i> DSM 41855
Sso-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces somaliensis</i> DSM 40738
Ssp-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. 303MFC05.2
Ssp-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. 351MFTsu.5.1
Ssp-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. AA0539
Ssp-5-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. AA4
Ssp-7-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. Amel2xE9
Ssp-6-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. ATeXAB-D23
Ssp-8-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. C
Ssp-14-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CcalMP-8W
Ssp-9-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNB091
Ssp-10-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNS615
Ssp-11-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNT302
Ssp-12-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNT372
Ssp-13-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. CNY228
Ssp-15-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. DvalAA-83
Ssp-44-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. e14
Ssp-16-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. FxanaD5
Ssp-17-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. GBA 94-10
Ssp-18-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. HCCB10043
Ssp-19-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. HGB0020
Ssp-21-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. HmicA12
Ssp-20-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. HPH0547
Ssp-22-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. KhCrAH-244
Ssp-23-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. KhCrAH-340
Ssp-24-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. LaPpAH-108
Ssp-25-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. LaPpAH-165
Ssp-26-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. LaPpAH-202
Ssp-27-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. LaPpAH-95
Ssp-28-1 to Ssp-28-2	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. Mg1
Ssp-29-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. PAMC26508
Ssp-31-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. PsTaAH-124
Ssp-30-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. PVA 94-07
Ssp-32-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. R1-NS-10
Ssp-33-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. S4
Ssp-34-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. SA3_actF
Ssp-35-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. SA3_actG
Ssp-39-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. ScaeMP-e10
Ssp-40-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. SirexAA-E
Ssp-36-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. SPB74
Ssp-37-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. SPB78
Ssp-38-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. SS
Ssp-41-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. TOR3209
Ssp-42-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. Tu6071
Ssp-43-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces</i> sp. W007
Ssu-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces sulphureus</i> DSM 40104
Ssu-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces sulphureus</i> L180
Ssv-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces sviveus</i> ATCC 29083
Sts-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces tsukubaensis</i> NRRL18488
Stu-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces turgidiscabies</i> Car8
Sve-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces venezuelae</i> ATCC 10712
Svi-2-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces violaceusniger</i> SPC6
Svi-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces violaceusniger</i> Tu 4113
Svi-4-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces viridochromogenes</i> DSM 40736
Svi-5-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces viridochromogenes</i> Tue57
Svi-6-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces viridosporus</i> T7A
Svi-7-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces vitaminophilus</i> DSM 41686
Szi-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces zinciresistens</i> K42
Sba-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptomycineae	Streptomycetaceae	<i>Streptomyces bacterium</i> MP113-05
Nco-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptosporangineae	Streptosporangiaceae	<i>Nomomuraea cozensis</i> DSM 45129
Sro-3-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptosporangineae	Streptosporangiaceae	<i>Streptosporangium roseum</i> DSM 43021
Tcu-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Streptosporangineae	Thermomonosporaceae	<i>Thermomonospora curvata</i> DSM 43183
Bas-1-1	Bacteria	Actinobacteria	Actinobacteridae	Bifidobacteriales	Bifidobacteriaceae	<i>Bifidobacterium asteroides</i> PRL2011	

Blo-1-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> D2957
Blo-2-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> DJO10A
Blo-3-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> E18
Blo-4-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> NCC2705
Blo-5-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>infantis</i> 157F
Blo-6-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>infantis</i> ATCC 15697
Blo-7-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>infantis</i> ATCC 15697 = JCM 1222
Blo-8-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>infantis</i> ATCC 55813
Blo-9-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>infantis</i> CCUG 52486
Blo-10-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> 1-6B
Blo-11-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> 2-2B
Blo-12-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> 35B
Blo-13-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> 44B
Blo-14-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> BBMN68
Blo-15-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> CECT 7347
Blo-16-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> F8
Blo-17-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> JCM 1217
Blo-18-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> JDM301
Blo-19-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> KACC 91563
Bsp-1-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium</i> sp. 12.1.47BFAA
Bth-1-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium thermophilum</i> RBL67
aLL-1-1	Bacteria Actinobacteria actinobacterium LLX17	
Ade-2-1	Bacteria Actinobacteria Actinomycetales Actinomycetaceae	<i>Actinomyces dentalis</i> DSM 19115
Age-1-1	Bacteria Actinobacteria Actinomycetales Actinomycetaceae	<i>Actinomyces gerencseriae</i> DSM 6844
Apo-1-1	Bacteria Actinobacteria Actinomycetales Actinomycetaceae	<i>Actinomyces polymesiensis</i>
Asu-2-1	Bacteria Actinobacteria Actinomycetales Actinomycetaceae	<i>Actinomyces suimastitidis</i> DSM 15538
Aha-2-1	Bacteria Actinobacteria Actinomycetales Actinomycetaceae	<i>Arcanobacterium haemolyticum</i>
Bas-2-1 to Bas-2-3	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium asteroides</i>
Bas-3-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium asteroides</i> DSM 20089
Bbo-1-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium boum</i>
Bbo-2-1 to Bbo-2-2	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium boum</i> DSM 20432
Bco-1-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium coryneforme</i>
Bco-2-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium coryneforme</i> DSM 20216
Bin-1-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium indicum</i> LMG 11587 = DSM 20214
Blo-20-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i>
Blo-21-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> AGR2137
Blo-22-1 to Blo-22-9	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>infantis</i>
Blo-23-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>infantis</i> ATCC 15697 = JCM 1222 = DSM 20088
Blo-24-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>infantis</i> EK3
Blo-25-1 to Blo-25-2	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i>
Blo-26-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> 1-5B
Blo-27-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> 17-1B
Blo-28-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> 7-1B
Blo-29-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> 72B
Blo-30-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> CMCC P0001
Blo-31-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> EK13
Blo-32-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> EK5
Blo-33-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>longum</i> GT15
Blo-34-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>suis</i>
Blo-35-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium longum</i> subsp. <i>suis</i> DSM 20211
Bme-1-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium merycicum</i>
Bme-2-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium merycicum</i> DSM 6492
Bre-1-1 to Bre-1-2	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium reuteri</i> DSM 23975
Bsc-1-1 to Bsc-1-2	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium scardovii</i>
Bsc-2-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium scardovii</i> JCM 12489 = DSM 13734
Bsp-2-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium</i> sp. 7101
Bsp-3-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium</i> sp. A11
Bsu-1-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium subtile</i>
Bsu-2-1 to Bsu-2-2	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium subtile</i> DSM 20096
Bth-2-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium thermacidophilum</i> subsp. <i>porcinum</i>
Bth-3-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium thermacidophilum</i> subsp. <i>porcinum</i> DSM 17755
Bth-4-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium thermacidophilum</i> subsp. <i>thermacidophilum</i>
Bth-5-1 to Bth-5-2	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium thermacidophilum</i> subsp. <i>thermacidophilum</i> DSM 15837
Bth-6-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium thermophilum</i>
Bth-7-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium thermophilum</i> DSM 20210

Bth-8-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium thermophilum</i> DSM 20212
Bts-1-1	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium tsurumiense</i>
Bts-2-1 to Bts-2-2	Bacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae	<i>Bifidobacterium tsurumiense</i> DSM 17777
Aac-1-1	Bacteria Actinobacteria Catenulesporales Actinospicaceae	<i>Actinospica acidiphila</i>
Aro-1-1	Bacteria Actinobacteria Catenulesporales Actinospicaceae	<i>Actinospica robiniae</i> DSM 44927
Gal-2-1	Bacteria Actinobacteria Corynebacteriales Gordoniaceae	<i>Gordonia alkanivorans</i> CGMCC 6845
Gal-3-1	Bacteria Actinobacteria Corynebacteriales Gordoniaceae	<i>Gordonia alkanivorans</i> s104
Gam-3-1	Bacteria Actinobacteria Corynebacteriales Gordoniaceae	<i>Gordonia amicalis</i> CCMA-559
Ghi-1-1 to Ghi-1-2	Bacteria Actinobacteria Corynebacteriales Gordoniaceae	<i>Gordonia hirsuta</i> DSM 44140 = NBRC 16056
Gja-1-1	Bacteria Actinobacteria Corynebacteriales Gordoniaceae	<i>Gordonia jacobaea</i>
Gsh-1-1	Bacteria Actinobacteria Corynebacteriales Gordoniaceae	<i>Gordonia shandongensis</i> DSM 45094
Gsi-2-1	Bacteria Actinobacteria Corynebacteriales Gordoniaceae	<i>Gordonia sihwensis</i>
Gte-3-1	Bacteria Actinobacteria Corynebacteriales Gordoniaceae	<i>Gordonia terrae</i>
Mab-1-1 to Mab-1-166	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i>
Mab-59-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> 21
Mab-60-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> CF
Mab-61-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> M24
Mab-62-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> MAB_030201_1061
Mab-63-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> MAB_030201_1075
Mab-64-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> MAB_082312_2272
Mab-65-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> MAB_082312_2273
Mab-66-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> MAB_091912_2455
Mab-67-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> MAB_110811_1470
Mab-68-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> MAB_110811_2726
Mab-70-1 to Mab-70-2	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> subsp. <i>abscessus</i>
Mab-71-1 to Mab-71-3	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> subsp. <i>bolletii</i>
Mab-72-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> subsp. <i>bolletii</i> 103
Mab-73-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> subsp. <i>bolletii</i> INCQS 00594
Mab-74-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> subsp. <i>massiliense</i> CCUG 48898 = JCM 15300
Mab-75-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> subsp. <i>massiliense</i> str. GO 06
Mab-69-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium abscessus</i> UC22
Mar-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium aromaticivorans</i> JS19b1 = JCM 16368
Mau-2-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium aurum</i>
Mau-3-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium austroafricanum</i>
Mvu-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium avium</i> complex (MAC) <i>Mycobacterium vulneris</i>
Mch-2-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium chelonae</i>
Mch-3-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium chelonae</i> 1518
Mch-4-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium chlorophenicum</i>
Mch-5-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium chubuense</i>
Mco-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium conceptionense</i>
Mco-2-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium cosmeticum</i>
Mel-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium elephantis</i>
Mfa-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium farcinogenes</i>
Mfo-2-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium fortuitum</i> complex <i>Mycobacterium fortuitum</i> Z58
Mhe-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium heraklionense</i>
Mim-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium immunogenum</i>
Mka-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium kansaii</i> Z61
Mky-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium kyorinense</i>
Mll-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium llutzerense</i>
Mma-2-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium mageritense</i> DSM 44476 = CIP 104973
Mne-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium neoaurum</i>
Mne-2-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium neoaurum</i> ATCC 25795
Mne-3-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium neoaurum</i> VKM Ac-1815D
Mob-1-1 to Mob-1-2	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium obuense</i>
Mru-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium rufum</i>
Mse-1-1 to Mse-1-2	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium senegalense</i>
Mse-2-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium septicum</i> DSM 44393
Mse-3-1 to Mse-3-2	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium setense</i>
Msp-11-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium</i> sp. EPa45
Msp-12-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium</i> sp. UM_Kg1
Msp-13-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium</i> sp. UM_Kg17
Msp-14-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium</i> sp. UM_Kg27
Msp-15-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium</i> sp. UM_NYF
Msp-16-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium</i> sp. UM_NZ2
Msp-17-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae	<i>Mycobacterium</i> sp. UM_WGJ

Msp-18-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae <i>Mycobacterium sp.</i> UM_WWY
Msp-19-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae <i>Mycobacterium sp.</i> UNC280MFTsu5.1
Msp-20-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae <i>Mycobacterium sp.</i> UNC410CL29Cvi84
Msp-21-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae <i>Mycobacterium sp.</i> UNCL9
Msp-22-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae <i>Mycobacterium sp.</i> URHB0044
Msp-23-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae <i>Mycobacterium sp.</i> URHD0025
Msp-24-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae <i>Mycobacterium sp.</i> VKM Ac-1816D
Msp-25-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae <i>Mycobacterium sp.</i> VKM Ac-1817D
Mar-2-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae Mycobacterium Mycobacterium terrae complex <i>Mycobacterium arupense</i>
Mtu-1-1	Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae <i>Mycobacterium tusciae</i> JS617
Nab-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia abscessus</i> NBRC 100374
Nao-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia aobensis</i> NBRC 100429
Nar-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia araoensis</i> NBRC 100135
Nas-2-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia asiatica</i> NBRC 100129
Nbr-2-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia brasiliensis</i> IFM 10847
Nbr-3-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia brasiliensis</i> NBRC 14402
Nbr-4-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia brevicatena</i> NBRC 12119
Nca-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia carnea</i>
Nca-2-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia carnea</i> NBRC 14403
Nce-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia cerradoensis</i> NBRC 101014
Ncy-2-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia cyriacigeorgica</i> NBRC 100375
Nex-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia exalbida</i> NBRC 100660
Nhi-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia higoensis</i> NBRC 100133
Nji-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia jiangxiensis</i> NBRC 101359
Nni-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia niigatensis</i> NBRC 100131
Nno-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia nova</i> SH22a
Not-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia otitidiscaviarum</i> IFM 11049
Not-2-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia otitidiscaviarum</i> NBRC 14405
Npa-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia paucivorans</i> NBRC 100373
Npn-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia pneumoniae</i> NBRC 100136
Nrh-1-1 to Nrh-1-2	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia rhamnosiphila</i> NBRC 108938
Nsp-5-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia sp.</i> BMG51109
Nsp-6-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia sp.</i> CNY236
Nsp-7-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia sp.</i> NRRL WC-3656
Nta-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia takedensis</i> NBRC 100417
Nte-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia tenerifensis</i> NBRC 101015
Nte-2-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia testacea</i> NBRC 100365
Nth-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia thailandica</i> NBRC 100428
Ntr-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia transvalensis</i> NBRC 15921
Nve-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia veterana</i> NBRC 100344
Nvi-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia vinacea</i> NBRC 16497
Nvu-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Nocardia vulneris</i>
Rae-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus aetherivorans</i>
Rde-1-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus defluvi</i>
Rer-6-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus erythropolis</i>
Rer-7-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus erythropolis</i> R138
Rfa-1-1 to Rfa-1-2	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i>
Rfa-2-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> 02-815
Rfa-3-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> 02-816c
Rfa-4-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> 04-516
Rfa-5-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> 05-339-1
Rfa-6-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> 05-561-1
Rfa-7-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> A21d2
Rfa-8-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> A25f
Rfa-9-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> A3b
Rfa-10-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> A44A
Rfa-11-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> A73a
Rfa-12-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> A76
Rfa-13-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> A78
Rfa-14-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> D188
Rfa-15-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> G1C26
Rfa-16-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> G1C36
Rfa-17-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> LMG 3602
Rfa-18-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> LMG 3605
Rfa-19-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> LMG 3616

Rfa-20-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> LMG 3625
Rfa-21-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus fascians</i> NBRC 12155 = LMG 3623
Rop-4-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus opacus</i>
Rop-3-1 to Rop-3-2	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus opacus</i> PD630
Rqi-2-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus qingshengii</i>
Rrh-3-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus rhodnii</i>
Rrh-4-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus rhodochrous</i>
Rrh-5-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus rhodochrous</i> ATCC 17895
Rrh-6-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus rhodochrous</i> ATCC 21198
Rru-3-1 to Rru-3-2	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus ruber</i>
Rsp-10-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. 311R
Rsp-11-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. AD45
Rsp-12-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. ARP2
Rsp-13-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. B7740
Rsp-14-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. Chr-9
Rsp-15-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. JG-3
Rsp-16-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. MEB064
Rsp-22-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. p52
Rsp-17-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. PML026
Rsp-18-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. R04
Rsp-19-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. RD6.2
Rsp-20-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. UNC23MFCrub1.1
Rsp-21-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus</i> sp. UNC363MFTsu5.1
Rwr-2-1	Bacteria Actinobacteria Corynebacteriales Nocardiaceae <i>Rhodococcus wratislaviensis</i> NBRC 100605
Tbi-1-1	Bacteria Actinobacteria Corynebacteriales <i>Tomitella biformata</i> AHU 1821
Tsp-1-1	Bacteria Actinobacteria Corynebacteriales Tsukamurellaceae <i>Tsukamurella</i> sp. 1534
Whe-1-1	Bacteria Actinobacteria Corynebacteriales Williamsiaceae <i>Williamsia herbipolensis</i>
Car-1-1	Bacteria Actinobacteria Frankiales Cryptosporangiaceae <i>Cryptosporangium arvum</i> DSM 44712
Fco-1-1	Bacteria Actinobacteria Frankiales Frankiaceae <i>Frankia coriariae</i>
Fsa-1-1	Bacteria Actinobacteria Frankiales Frankiaceae <i>Frankia saprophytica</i>
Fsp-10-1	Bacteria Actinobacteria Frankiales Frankiaceae <i>Frankia</i> sp. Allo2
Fsp-11-1	Bacteria Actinobacteria Frankiales Frankiaceae <i>Frankia</i> sp. BMG5.23
Fsp-12-1	Bacteria Actinobacteria Frankiales Frankiaceae <i>Frankia</i> sp. CeD
Fsp-13-1	Bacteria Actinobacteria Frankiales Frankiaceae <i>Frankia</i> sp. Cp11-S
Fsp-14-1	Bacteria Actinobacteria Frankiales Frankiaceae <i>Frankia</i> sp. DC12
Fsp-15-1	Bacteria Actinobacteria Frankiales Frankiaceae <i>Frankia</i> sp. Thr
Gar-2-1	Bacteria Actinobacteria Glycomycetales Glycomycetaceae <i>Glycomyces arizonensis</i> DSM 44726
Gsp-3-1	Bacteria Actinobacteria Glycomycetales Glycomycetaceae <i>Glycomyces</i> sp. NRRRL B-16210
Gte-4-1	Bacteria Actinobacteria Glycomycetales Glycomycetaceae <i>Glycomyces tenuis</i>
Gte-5-1	Bacteria Actinobacteria Glycomycetales Glycomycetaceae <i>Glycomyces tenuis</i> DSM 44171
Hal-1-1	Bacteria Actinobacteria Glycomycetales Glycomycetaceae <i>Haloglycomyces albus</i> DSM 45210
Jal-1-1	Bacteria Actinobacteria Jiangellales Jiangellaceae <i>Jiangella alkaliphila</i>
Jga-1-1	Bacteria Actinobacteria Jiangellales Jiangellaceae <i>Jiangella gansuensis</i> DSM 44835
Jmu-1-1	Bacteria Actinobacteria Jiangellales Jiangellaceae <i>Jiangella muralis</i>
Cbo-1-1	Bacteria Actinobacteria Micrococcales Cellulomonadaceae <i>Cellulomonas bogoriensis</i> 69B4 = DSM 16987
Bph-1-1	Bacteria Actinobacteria Micrococcales Dermabacteraceae <i>Brachybacterium phenoliresistens</i>
Dho-1-1	Bacteria Actinobacteria Micrococcales Dermabacteraceae <i>Dermabacter hominis</i> 1368
Ase-1-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Actinocatenispora sera</i>
Are-1-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Actinoplanes rectilineatus</i>
Asu-3-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Actinoplanes subtropicus</i>
Aut-1-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Actinoplanes utahensis</i>
Cja-1-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Catenuloplanes japonicus</i>
Dau-1-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Dactylosporangium aurantiacum</i>
Mca-1-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Micromonospora carbonacea</i>
Mch-6-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Micromonospora chokoriensis</i>
Mgl-1-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Micromonospora globosa</i>
Mpa-1-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Micromonospora parva</i>
Mpu-1-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Micromonospora purpureochromogenes</i>
Msp-26-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Micromonospora</i> sp. HK10
Msp-27-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Micromonospora</i> sp. M42
Msp-28-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Micromonospora</i> sp. RV43
Pan-1-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Pilimelia anulata</i>
Sar-20-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Salinispora arenicola</i>
Sar-21-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Salinispora arenicola</i> CNB458
Sar-22-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae <i>Salinispora arenicola</i> CNB527

Sar-23-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNH646
Sar-24-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNH905
Sar-25-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNH941
Sar-26-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNH963
Sar-27-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNH964
Sar-28-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNQ748
Sar-29-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNR416
Sar-30-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNR425
Sar-31-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNR921
Sar-32-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNS243
Sar-33-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNS299
Sar-34-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNS744
Sar-35-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNT005
Sar-36-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNT798
Sar-37-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNT799
Sar-38-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNT800
Sar-39-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNT850
Sar-40-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNT857
Sar-41-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNX482
Sar-42-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNX508
Sar-43-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora arenicola</i> CNX891
Spa-21-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNR114
Spa-22-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNR894
Spa-23-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNS103
Spa-24-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNS237
Spa-25-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT001
Spa-26-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT003
Spa-27-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT029
Spa-28-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT084
Spa-29-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT131
Spa-30-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT138
Spa-31-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT148
Spa-32-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT150
Spa-33-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT569
Spa-34-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT603
Spa-35-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT796
Spa-36-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT854
Spa-37-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNT855
Spa-38-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNY202
Spa-39-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNY239
Spa-40-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora pacifica</i> CNY331
Str-4-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora tropica</i> CNB476
Str-5-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora tropica</i> CNB536
Str-6-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora tropica</i> CNH898
Str-7-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora tropica</i> CNS197
Str-8-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora tropica</i> CNT250
Str-9-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora tropica</i> CNT261
Str-10-1	Bacteria Actinobacteria Micromonosporales Micromonosporaceae	<i>Salinispora tropica</i> CNY012
Nla-1-1	Bacteria Actinobacteria Nakamurellales Nakamurellaceae	<i>Nakamurella lactea</i> DSM 19367
Ama-4-1	Bacteria Actinobacteria Propionibacteriales Nocardiodaceae	<i>Aeromicrobium massiliense</i> JC14
Msp-29-1	Bacteria Actinobacteria Propionibacteriales Nocardiodaceae	<i>Marmoricola</i> sp. URHB0036
Nal-1-1	Bacteria Actinobacteria Propionibacteriales Nocardiodaceae	<i>Nocardioides alkalitolerans</i> DSM 16699
Nin-1-1	Bacteria Actinobacteria Propionibacteriales Nocardiodaceae	<i>Nocardioides insulae</i> DSM 17944
Nlu-1-1	Bacteria Actinobacteria Propionibacteriales Nocardiodaceae	<i>Nocardioides luteus</i>
Nsp-8-1	Bacteria Actinobacteria Propionibacteriales Nocardiodaceae	<i>Nocardioides</i> sp. UNC345MFTsu5.1
Nsp-9-1	Bacteria Actinobacteria Propionibacteriales Nocardiodaceae	<i>Nocardioides</i> sp. URHA0020
Nsp-10-1	Bacteria Actinobacteria Propionibacteriales Nocardiodaceae	<i>Nocardioides</i> sp. URHA0032
Psu-1-1	Bacteria Actinobacteria Propionibacteriales Nocardiodaceae	<i>Propioniceella superfundia</i> DSM 22317
Ply-2-1	Bacteria Actinobacteria Propionibacteriales Propionibacteriaceae	<i>Propionimicrobium lymphophilum</i> DSM 4903
Psp-7-1	Bacteria Actinobacteria Propionibacteriales Propionibacteriaceae	<i>Propionimicrobium</i> sp. BV2F7
Acy-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Actinoalloteichus cyanogriseus</i>
Acy-2-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Actinoalloteichus cyanogriseus</i> DSM 43889
Ain-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Actinokineospora inagensis</i> DSM 44258
Asp-5-1 to Asp-5-2	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Actinokineospora sphericospongiae</i>
Aal-2-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Allokutzneria alata</i>

Aha-3-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis halophila</i> YIM 93223
Aja-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis japonica</i>
Aje-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis jejuensis</i>
Ame-5-1 to Ame-5-2	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis mediterranei</i>
Ame-4-1 to Ame-4-2	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis methanolica</i> 239
Aor-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis orientalis</i>
Aor-2-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis orientalis</i> DSM 40040 = KCTC 9412
Aor-3-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis orientalis</i> DSM 43388
Aor-4-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis orientalis</i> DSM 46075
Ari-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis rifamycinica</i>
Asp-6-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis</i> sp. MJM2582
Ata-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis taiwanensis</i> DSM 45107
Ath-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis thermoflava</i> N1165
Ava-2-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Amycolatopsis vancoresmycina</i>
Kar-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Kibdelosporangium aridum</i> subsp. <i>largum</i>
Ksp-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Kibdelosporangium</i> sp. MJ126-NF4
Kal-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Kutzneria albida</i>
Kal-2-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Kutzneria albida</i> DSM 43870
Ksp-2-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Kutzneria</i> sp. 744
Lae-1-1 to Lae-1-2	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Lechevalieria aerocolonigenes</i>
Lal-2-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Lentzea albidocapillata</i>
Pru-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Prauserella rugosa</i>
Psp-8-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Prauserella</i> sp. Am3
Pac-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Pseudonocardia acaciae</i> DSM 45401
Pas-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Pseudonocardia asaccharolytica</i> DSM 44247 = NBRC 16224
Pau-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Pseudonocardia autotrophica</i>
Psp-9-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Pseudonocardia</i> sp. P2
Psp-10-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Pseudonocardia spinosisporea</i> DSM 44797
[ir-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	Saccharomonospora [Actinopolyspora] <i>iraqiensis</i> IQ-H1
Spa-41-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Saccharomonospora paurometabolica</i> YIM 90007
Ssp-45-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Saccharomonospora</i> sp. CNQ490
Svi-8-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Saccharomonospora viridis</i>
Sre-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Saccharopolyspora rectivirgula</i>
Sre-2-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Saccharopolyspora rectivirgula</i> DSM 43747
Ssp-46-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Saccharothrix</i> sp. NRRL B-16314
Ssy-1-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Saccharothrix syringae</i>
Ssp-47-1	Bacteria Actinobacteria Pseudonocardiales Pseudonocardiaceae	<i>Sciscionella</i> sp. SE31
Kar-2-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Kitasatospora arboriphila</i>
Kau-1-1 to Kau-1-2	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Kitasatospora aureofaciens</i>
Kaz-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Kitasatospora azatica</i> KCTC 9699
Sal-2-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptacidiphilus albus</i>
Sal-3-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptacidiphilus albus</i> JL83
Sje-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptacidiphilus jeojiense</i>
Sji-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptacidiphilus jiangxiensis</i>
Sru-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptacidiphilus rugosus</i> AM-16
[pa-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	Streptomyces [Kitasatospora] <i>papulosa</i>
Asp-7-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	Streptomyces <i>Actinosporangium</i> sp. NRRL B-3428
Sac-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces achromogenes</i> subsp. <i>achromogenes</i>
Sal-4-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	Streptomyces <i>Streptomyces albidoflavus</i> group <i>Streptomyces albidoflavus</i>
Sal-5-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces alboflavus</i>
Sal-6-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces alboviridis</i>
Sal-7-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces albus</i>
Sal-8-1 to Sal-8-4	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces albus</i> subsp. <i>albus</i>
Sam-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces ambofaciens</i> ATCC 23877
San-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces antibioticus</i>
San-2-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces anulatus</i>
Sat-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces atratus</i>
Sat-2-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces atroolivaceus</i>
Sau-1-1 to Sau-1-2	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces aureocirculatus</i>
Sau-2-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces aureus</i>
Sav-2-1 to Sav-2-2	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces avermitilis</i> MA-4680 = NBRC 14893
Sav-3-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces avicenniae</i>
Sba-2-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces baarnensis</i>
Sbi-2-1 to Sbi-2-2	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces bicolor</i>
Sbi-3-1 to Sbi-3-3	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces bikiniensis</i>

Sbr-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces brasiliensis</i>
Sca-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces caatingaensis</i>
Sca-4-1 to Sca-4-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces californicus</i>
Sca-5-1 to Sca-5-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces capuensis</i>
Sce-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces cellulosa</i>
Scy-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces cyaneofuscatus</i>
Scy-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces cyaneogriseus subsp. noncyanogenus</i>
Sdu-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces durhamensis</i>
Ser-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces erythrochromogenes</i>
Seu-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces europaeiscabiei</i>
Sex-1-1 to Sex-1-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces exfoliatus</i>
Sex-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces exfoliatus</i> DSM 41693
Sfl-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flaveolus</i>
Sfl-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flaveus</i>
Sfl-4-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flavidovirens</i> DSM 40150
Sfl-5-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flavochromogenes</i>
Sfl-6-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flavotricini</i>
Sfl-7-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flavovariabilis</i>
Sfl-8-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces flavovirens</i>
Sfl-9-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces floridae</i>
Sfu-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces fulvoviolaceus</i>
Sfu-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces fulvoviridis</i>
Sga-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces galbus</i>
Sgl-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces glaucescens</i>
Sgl-4-1 to Sgl-4-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces globisporus subsp. globisporus</i>
Sgr-5-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces graminis</i>
Sgr-6-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseoflavus</i>
Sgr-7-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseofuscus</i>
Sgr-8-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseolus</i>
Sgr-9-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseoluteus</i>
Sgr-10-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseorubens</i>
Sgr-11-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseus</i>
Sgr-12-1 to Sgr-12-9	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseus subsp. griseus</i>
Sgr-13-1 to Sgr-13-5	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces griseus subsp. rhodochrous</i>
Sha-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces halstedii</i>
Shy-4-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces hygrosopicus subsp. hygrosopicus</i>
Sia-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces iakyrus</i>
Sir-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces iranensis</i>
Ska-1-1 to Ska-1-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces katrae</i>
Sla-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces lavendulae</i>
Sla-2-1 to Sla-2-4	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces lavendulae subsp. lavendulae</i>
Sla-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces lavenduligriseus</i>
Sle-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces leeuwenhoekii</i>
Sli-2-1 to Sli-2-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces lividans</i> TK24
Slu-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces luteus</i>
Sme-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces mediolani</i>
Smi-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces mirabilis</i>
Sno-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces nodosus</i>
Sod-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces odonnellii</i>
Sol-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces olindensis</i>
Sol-2-1 to Sol-2-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces olivaceus</i>
Spe-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces peruviansis</i>
Spe-2-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces peucetius</i>
Spl-1-1 to Spl-1-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces pluripotens</i>
Spu-2-1 to Spu-2-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces puniceus</i>
Spu-3-1 to Spu-3-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces purpeochromogenes</i>
Sre-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces resistomyeticus</i>
Sri-2-1 to Sri-2-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces rimosus</i>
Sri-3-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces rimosus</i> R6-500
Sri-4-1 to Sri-4-20	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces rimosus subsp. rimosus</i>
Sro-4-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces roseosporus</i> NRRL 11379
Sro-5-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces roseovorticillatus</i>
Sro-6-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces roseus</i>
Sru-2-1 to Sru-2-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces ruber</i>
Ssc-3-1 to Ssc-3-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces scabiei</i>

Ssc-4-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sclerotialis</i>
Ssc-5-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces scopuliridis</i> RB72
Sse-1-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces seoulensis</i>
Ssp-48-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> 142MFCol3.1
Ssp-50-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> Ach 505
Ssp-49-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> AW19M42
Ssp-51-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNH287
Ssp-52-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNQ431
Ssp-53-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNR698
Ssp-54-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNS606
Ssp-55-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNS654
Ssp-56-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> CNT360
Ssp-57-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> DpondAA-B6
Ssp-59-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> FxanaA7
Ssp-58-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> FXJ7.023
Ssp-60-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> GXT6
Ssp-61-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> HNS054
Ssp-62-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> JS01
Ssp-63-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> KE1
Ssp-64-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> KhCrAH-337
Ssp-65-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> KhCrAH-40
Ssp-66-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> M10
Ssp-67-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MBT28
Ssp-28-1 to Ssp-28-2	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> Mg1
Ssp-68-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MNU77
Ssp-69-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MUSC 125
Ssp-70-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MUSC119T
Ssp-71-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MUSC136T
Ssp-72-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MUSC149T
Ssp-73-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> MUSC164
Ssp-74-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NBRC 110035
Ssp-75-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL B-11253
Ssp-76-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL B-12105
Ssp-77-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL B-1322
Ssp-78-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL B-1347
Ssp-79-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL B-1381
Ssp-80-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL B-24051
Ssp-81-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL B-24720
Ssp-82-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL B-3229
Ssp-83-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL B-3253
Ssp-84-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-2202
Ssp-85-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-2305
Ssp-86-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-2580
Ssp-87-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-2664
Ssp-88-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-2747
Ssp-89-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-2799
Ssp-90-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-2890
Ssp-91-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-3213
Ssp-92-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-3218
Ssp-93-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-3273
Ssp-94-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-3307
Ssp-95-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-4335
Ssp-96-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-4428
Ssp-97-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-4474
Ssp-98-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-4835
Ssp-99-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-5008
Ssp-100-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-5053
Ssp-101-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-5065
Ssp-102-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-5126
Ssp-103-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-5135
Ssp-104-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-5140
Ssp-105-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-5193
Ssp-106-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-525
Ssp-107-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-5527
Ssp-108-1	Bacteria Actinobacteria Streptomyetales Streptomyetaceae	<i>Streptomyces sp.</i> NRRL F-5555

Ssp-174-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces sp.</i> URHA0041
Ssp-175-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces sp.</i> WM6386
Ssp-176-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces sp.</i> WM6391
Ssp-177-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces sp.</i> WMMB 714
Sst-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces stelliscabiei</i>
Sto-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces toyocaensis</i>
Sva-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces variegatus</i>
Sva-2-1 to Sva-2-2	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces varsoviensis</i>
Svi-9-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces vietnamensis</i>
Svi-10-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces vinaceus</i>
Svi-11-1 to Svi-11-2	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces violaceoruber</i>
Svi-12-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces violaceorubidus</i>
Svi-13-1 to Svi-13-3	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces virginiae</i>
Svi-14-1 to Svi-14-4	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces viridochromogenes</i>
Swa-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces wadayamensis</i>
Swe-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces wedmorensis</i>
Sxa-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces xanthophaeus</i>
Sxi-2-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces xiamenensis</i>
Sxy-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces xylophagus</i>
Sya-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces yangpuensis</i>
Sye-1-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces yeochonensis</i> CN732
Sye-2-1	Bacteria Actinobacteria Streptomycetales Streptomycetaceae	<i>Streptomyces yerevanensis</i>
Hcr-1-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Herbidospora cretacea</i>
Mro-1-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Microbispora rosea subsp. nonnitritogenes</i>
Msp-30-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Microbispora sp.</i> NRRL B-24597
Mgl-2-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Microtetraspora glauca</i>
Nca-3-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Nonomuraea candida</i>
Nsp-11-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Nonomuraea sp.</i> SBT364
Sam-2-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Streptosporangium amethystogenes</i>
Sro-7-1	Bacteria Actinobacteria Streptosporangiales Streptosporangiaceae	<i>Streptosporangium roseum</i>
Ama-5-1	Bacteria Actinobacteria Streptosporangiales Thermomonosporaceae	<i>Actinomadura madurae</i> LIID-AJ290
Ari-2-1	Bacteria Actinobacteria Streptosporangiales Thermomonosporaceae	<i>Actinomadura rifamycini</i> DSM 43936
Dsp-2-1	Bacteria Firmicutes Clostridia Clostridiales Peptococcaceae	<i>Dehalobacter sp.</i> FTH1
env-1 to env-666	environmental samples	

9.2 Gene contexts

Each L31-Actinobacteria RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one L31-Actinobacteria RNA are assigned a color; other domains are gray. Information about these con-

served domains is given in Section 9.3. The accession of the sequence containing each L31-Actinobacteria RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each L31-Actinobacteria RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 9.1.

abbrev.	Seq. accession	5′ at	3′ at	genes
env-1	3300001239_10346507	-	863	813 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PCRf (smart00937)PCRf (pfam03462)→
env-2	topACOD_FV90NF401DDBWP	-	101	65 RNA→
Vca-1-1	NZ_ATUF01000002.1	-	402422	402378 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
env-3	JGI12397J12024_1050070	+	67	116 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-4	JGI24736J21556_1099768	+	224	283 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-5	JGI24739J22299_10173028	-	428	369 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-6	JGI24737J22298_10039126	-	417	358 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

Cac-1-1	NC_013131.1	+	1360258	1360298	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-7	JGI12397J12024_1339528	+	56	114	RNA → hypo →
env-8	LWAnNNiSIP_GDN60OX01COTOZ	+	264	310	RNA →
env-9	JGI12396J12026_1108615	+	2	43	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-10	JGI12467J12023_1043457	+	377	418	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)PCRF (pfam03462) →
env-11	JGI12396J12026_1011438	+	24	84	RNA → ← hypo
env-12	JGI12273J12029_10084767	+	24	84	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-13	JGI2065J20421_1025414	+	78	138	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRF (smart00937)PCRF (pfam03462) →
env-14	JGI24770J26754_10678085	+	122	174	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apo-1-1	NZ_CCXH01000177.1	+	1390	1448	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-15	botACOD_GAKN62C01CC25B	+	172	219	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-16	AglaG_GDN60OX02G4DXO	-	301	242	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-17	JGI12396J12026_1002764	+	4	65	RNA → ← hypo
env-18	JGI12396J12026_1094345	+	9	87	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ama-3-1	NZ_CM001024.1	+	677475	677520	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HTH_LUXR (smart00421)CitB (COG2197) →
Nin-1-1	NZ_KE383929.1	-	680299	680255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-19	JGI11800J13271_1023285	-	253	187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-20	CEUF01060573.1	-	405	339	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Jga-1-1	NZ_KI911782.1	+	1567026	1567073	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hcr-1-1	NZ_JODQ01000002.1	-	16089	16035	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-21	JGI24735J21928_10338363	-	327	278	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asu-2-1	NZ_KE386848.1	+	67014	67059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462) → HemK (COG2890)PRK09328 (PRK09328) →
Psp-8-1	NZ_JTJI01000005.1	+	27456	27507	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pru-1-1	NZ_JOIJ01000022.1	+	44825	44876	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-22	JGI25321J39296_1051856	-	129	78	RNA → rpmE (PRK00019)rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-23	JGI25321J50212_10048695	-	336	285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-24	JGI25317J35169_1083333	+	5	56	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-25	C688J13580_1096905	+	58	98	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-5-1	NZ_JNZO01000018.1	+	362423	362470	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → hypo → hypo → hypo → hypo →
Jmu-1-1	NZ_KQ434753.1	-	67929	67882	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo → AtpI2 (COG5336)ATPase_gene1 (pfam09527) → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK06876 (PRK06876)AtpE (COG0636) → PRK05759 (PRK05759)AtpF (COG0711) → PRK13430 (PRK13430)OSCP (pfam00213) → AtpA (COG0056)PRK09281 (PRK09281) → PRK05621 (PRK05621)ATP-synt (pfam00231) →
env-26	JGI12397J12024_1025645	+	23	68	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-2-1	NZ_KB911723.1	-	80543	80496	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-27	FWIROz_GKA24FP02JUPYD	+	39	96	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-28	3300001592_10007801	-	2906	2841	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
Cbo-1-1	NZ_AXCZ01000025.1	-	21537	21491	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo →
aLL-1-1	NZ_KI301992.1	-	1665648	1665606	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
Msp-29-1	NZ_KE384490.1	+	243863	243905	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Mch-5-1	NZ_JYNX01000034.1	-	42359	42308	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →

Mch-4-1	NZ_JYNL01000069.1	-	3786	3735	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → hypo → hypo →
Aha-2-1	NZ_JUZA01000019.1	+	44897	44933	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462) → hypo → hypo → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK06876 (PRK06876)AtpE (COG0636) → PRK05759 (PRK05759)AtpF (COG0711) → PRK13430 (PRK13430)OSCP (pfam00213) → AtpA (COG0056)PRK09281 (PRK09281) → PRK05621 (PRK05621)ATP-synt (pfam00231) → AtpD (COG0055)PRK09280 (PRK09280) →
Ane-1-1	NZ_JH815214.1	+	304462	304498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462) → hypo → hypo → SUA5 (COG0009)HemK (COG2890)PRK09328 (PRK09328)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK06876 (PRK06876)AtpE (COG0636) → PRK05759 (PRK05759)AtpF (COG0711) → PRK13430 (PRK13430)OSCP (pfam00213) → AtpA (COG0056)PRK09281 (PRK09281) → PRK05621 (PRK05621)ATP-synt (pfam00231) → AtpD (COG0055)PRK09280 (PRK09280) →
env-29	PRSSGFe2_Sequence0000001542	-	7752	7691	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo → AtpI2 (COG5336)ATPase_gene1 (pfam09527) → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK07874 (PRK07874)AtpE (COG0636) → PRK05759 (PRK05759)AtpF (COG0711) → PRK13430 (PRK13430)OSCP (pfam00213) → PRK09281 (PRK09281)ATP-synt_ab_N (pfam02874) →
Sni-1-1	NZ_AQXZ01000013.1	-	17062	17017	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-30	JGI24770J26754_10040473	+	643	688	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Asp-2-1	NC_017803.1	-	8255931	8255885	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
env-31	DCrCPGB_c279856	-	114	45	RNA → hypo →
Hal-1-1	NZ_AZUQ01000001.1	+	2107349	2107408	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-32	4491734.3.12108778	+	329	367	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-169-1	NZ_AUKR01000002.1	-	319811	319766	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dsp-2-1	NZ_AQYY01000001.1	+	1361355	1361413	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo → AtpI2 (COG5336)SH3_and_anchor (TIGR04211) → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK07874 (PRK07874)AtpE (COG0636) → PRK05759 (PRK05759)AtpF (COG0711) → PRK13430 (PRK13430)OSCP (pfam00213) → AtpA (COG0056)PRK09281 (PRK09281) → PRK05621 (PRK05621)ATP-synt (pfam00231) → AtpD (COG0055)PRK09280 (PRK09280) →
Mel-1-1	NZ_LBNO01000049.1	-	15168	15110	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-33	FNTS067_GJ87FRN01EXCYZ	-	173	120	RNA → hypo →
Car-1-1	NZ_KK073874.1	-	7435021	7434972	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
env-34	ATED_F4WRAXD01CHLUA	-	225	176	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asp-3-1	NZ_AGVX02000017.1	-	538	468	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-35	FNTS_GKKEVUV01AVOLL	-	130	92	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-36	FNTS_GKKEVUV01BHC90	+	147	184	RNA →
Mth-1-1	NZ_AGVE01000042.1	-	531859	531799	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-37	JGI24740J21852_10021611	+	341	395	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-38	JGI24735J21928_10010623	+	1057	1111	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-39	APMI01059580.1	-	1604	1551	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-40	JGI12397J12024_1172898	+	68	120	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-41	JGI12396J12026_1047907	+	22	72	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-42	JGI12397J12024_1022031	+	22	72	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-96-1	NZ_JYJI01000122.1	-	1881	1833	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-6-1	NZ_JNXV01000514.1	+	1188	1236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sya-1-1	NZ_LBMK01000002.1	+	777882	777930	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-87-1	NZ_JOFX01000020.1	+	50692	50740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-122-1	NZ_JZWW01000282.1	-	1731	1683	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-150-1	NZ_JOJD01000020.1	-	213028	212980	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Svi-13-1	NZ_JOAK01000005.1	-	213389	213341	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-97-1	NZ_JOIB01000042.1	+	22450	22498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-148-1	NZ_JOGB01000028.1	-	45090	45041	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-88-1	NZ_JOIS01000002.1	+	34345	34393	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-164-1	NZ_JDUZ01000009.1	+	57343	57391	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Svi-13-2	NZ_LGUV01000348.1	+	15469	15517	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-95-1	NZ_JOFY01000017.1	-	211039	210991	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-132-1	NZ_JOCY01000015.1	-	213281	213233	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-28-1	NZ_DS570390.1	+	37435	37483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-28-2	NZ_CP011664.1	+	5363260	5363308	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-8-1	NZ_GG657750.1	+	5365177	5365225	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-143-1	NZ_JODE01000026.1	-	95012	94964	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-144-1	NZ_JODJ01000019.1	-	95012	94964	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sla-2-1	NZ_JOEW01000030.1	+	23758	23806	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ska-1-1	NZ_JZVV01000546.1	+	4574	4622	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sro-6-1	NZ_LFML01000043.1	-	44786	44738	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-133-1	NZ_JOCX01000002.1	+	316404	316452	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sxa-1-1	NZ_KL647135.1	-	194665	194617	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ska-1-2	NZ_JNZY01000009.1	-	192103	192055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-138-1	NZ_JOBX01000049.1	-	61013	60965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ser-3-1	NZ_JNZG01000011.1	+	30135	30183	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sla-2-2	NZ_JOBH01000032.1	+	31087	31135	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-77-1	NZ_JOHF01000038.1	+	31053	31101	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-131-1	NZ_JODA01000013.1	-	129059	129011	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-86-1	NZ_JOIR01000005.1	+	53139	53187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sla-1-1	NZ_JNXL01000021.1	+	3212	3260	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-166-1	NZ_JWZS01001028.1	-	3788	3740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Svi-13-3	NZ_JNYC01000007.1	+	377227	377275	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dsp-1-1	NZ_KE340308.1	-	2146886	2146842	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dho-1-1	NZ_KN323183.1	-	2148108	2148064	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bpa-1-1	NZ_AGSO01000002.1	-	39806	39767	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bph-1-1	NZ_KK069988.1	+	25747	25790	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfB (COG1186)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → hypo → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo →
Bfa-1-1	NC_013172.1	-	2159943	2159900	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-43	2204806299	+	97	140	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-44	2158018103	+	97	140	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-45	2157611060	-	212	169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-46	2204808654	-	212	169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bmu-1-1	NZ_AORC01000017.1	+	14987	15030	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRf (smart00937)RF-1 (pfam00472)PCRf (pfam03462) → HemK (COG2890)PRK09328 (PRK09328) → PHA03169 (PHA03169)SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo → hypo →
Bsq-1-1	NZ_AGBX01000007.1	-	600878	600835	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sba-1-1	NZ_KI547049.1	+	42821	42866	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-47	P3_CLC_Cons55403	-	298	252	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-48	JGI24770J26754_10015274	+	2104	2148	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-49	JGI12467J12023_1082663	+	17	88	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-50	3300001592_10976328	+	61	104	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-51	3300001592_10499386	+	49	92	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-52	JGI12273J12029_10089888	+	7	85	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-53	JGI12712J15308_10920105	-	124	57	RNA → ←hypo
env-54	JGI20163J15578_10158293	+	1046	1091	RNA → rpmE (PRK00019)rho (PRK09376)rho_factor (cd01128)Ribosomal_L31 (pfam01197) →
env-55	JGI12396J12026_1117834	+	20	67	RNA → hypo →
env-56	JGI12630J15595_10565893	+	41	109	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-57	JGI12396J12026_1055065	+	42	89	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462) →
env-58	JGI12273J12029_10130660	+	34	81	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-59	JGI12397J12024_1064796	+	44	91	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRF (smart00937)PCRF (pfam03462) →
Spo-1-1	NZ_KB913029.1	+	3641099	3641144	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-60	JGI24739J22299_10966797	+	95	143	RNA → ←hypo
env-61	JGI26538J50259_1004293	-	1226	1180	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRF (smart00937)RF-1 (pfam00472)PCRF (pfam03462) →
Ssp-51-1	NZ_AUKQ01000005.1	+	616357	616402	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sji-1-1	NZ_BBPN01000044.1	+	2914	2959	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aut-1-1	NZ_JRTT01000013.1	+	144414	144459	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Mtu-1-1	NZ_KI912270.1	-	156001	155939	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cko-1-1	NZ_KB903272.1	+	26084	26123	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Nla-1-1	NZ_AUFT01000001.1	-	90372	90294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nsp-9-1	NZ_JIAR01000025.1	-	305751	305704	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → hypo → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
env-62	JGI24738J21930_10349179	-	206	158	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Afr-1-1	NC_022657.1	-	8170022	8169953	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
env-63	JGI12397J12024_1210963	+	55	124	RNA → ←hypo
env-64	JGI12397J12024_1099088	+	55	124	RNA → ←hypo
Asu-3-1	NZ_JOJL01000007.1	-	354095	354026	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
env-65	JGI12397J12024_1237113	+	36	80	RNA → ←hypo
env-66	JGI12397J12024_1148967	+	11	80	RNA → ←hypo
env-67	JGI12273J12029_10092990	+	57	97	RNA → ←hypo
env-68	JGI12272J11983_1168523	+	58	98	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-69	JGI12271J12027_1090360	+	56	96	RNA → ←hypo
env-70	JGI12396J12026_1102605	+	43	84	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRF (smart00937)RF-1 (pfam00472)PCRF (pfam03462)ABC_tran_CTD (pfam16326) →
env-71	JGI12396J12026_1237335	-	118	77	RNA → ←hypo
env-72	JGI12273J12029_10179347	+	43	84	RNA → ←hypo
env-73	JGI12397J12024_1046578	+	44	85	RNA → ←hypo
env-74	JGI12273J12029_10030651	+	419	460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-75	JGI12272J11983_1113393	+	87	128	RNA → ←hypo
env-76	JGI12467J12023_1025401	+	18	59	RNA → ←hypo
env-77	JGI12271J12027_1039259	+	18	59	RNA → ←hypo
env-78	JGI12396J12026_1083332	+	54	95	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-79	JGI12397J12024_1046859	+	54	95	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)PCRF (pfam03462) →
env-80	JGI12397J12024_1016153	+	50	91	RNA → PRK08279 (PRK08279) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)PCRF (pfam03462) →
Ncy-1-1	NC_016887.1	+	1254812	1254859	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Ncy-2-1	NZ_BAFY01000056.1	+	16681	16728	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →

Npn-1-1	NZ_BAGF01000020.1	+	89242	89291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-81	JGI12271J12027_1026620	+	102	144	RNA → ←hypo
env-82	JGI12273J12029_10010121	+	4	46	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRf (smart00937)PCRf (pfam03462) →
env-83	JGI12397J12024_1000989	+	11	53	RNA → ←hypo
env-84	DCrCPGB.c187296	-	360	318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-85	JGI12467J12023_1052535	+	9	51	RNA → ←hypo
env-86	FNTS_GKKEVUV02H38F2	-	160	118	RNA → ←hypo
env-87	JGI12397J12024_1145631	+	15	60	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-88	JGI24737J22298_10298947	-	195	153	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-89	JGI24735J21928_10416994	-	88	46	RNA → hypo →
Sre-2-1	NZ_AYJW01000043.1	-	1191	1142	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRf (smart00937)RF-1 (pfam00472)PCRf (pfam03462)ABC_tran_CTD (pfam16326) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
Sre-1-1	NZ_JNVU01000048.1	-	201384	201335	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
Acy-1-1	NZ_KL573951.1	-	441934	441863	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Acy-2-1	NZ_AUBJ01000013.1	-	277214	277143	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Mrh-2-1	NC_016604.1	+	3820183	3820236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-90	JGI11758J13082_115022	+	103	146	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-91	JGI12112J13074_1001942	-	1400	1357	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRf (pfam03462) → RNA → ←hypo
env-92	JGI12060J13090_109431	-	402	359	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-93	CEQG01140696.1	+	747	790	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-94	JGI12075J13256_1000493	-	2999	2956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
env-95	JGI11800J13271_1002272	-	358	315	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-96	CETS01058554.1	+	353	396	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-97	SRS016575_C3611077	+	309	354	RNA → ←hypo
env-98	SRS020340_Baylor_scaffold_41668	+	245	290	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ade-2-1	NZ_AUBL01000029.1	+	17719	17764	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-99	SRS022536_C4437610	-	232	187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-100	SRS024144_LANL_scaffold_22347	+	53	98	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-101	SRS042984_C3945655	+	291	336	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-102	SRS065099_LANL_scaffold_83872	-	432	387	RNA → hypo →
env-103	SRS017139_Baylor_scaffold_27719	+	210	255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-104	SRS024355_LANL_scaffold_54831	-	212	167	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-105	SRS018443_Baylor_scaffold_61370	+	276	321	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-106	SRS013252_Baylor_scaffold_60598	+	250	295	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-107	SRS017691_C5148150	-	133	88	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-108	SRS021477_Baylor_scaffold_9272	+	137	182	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)PCRf (pfam03462) →
env-109	SRS024087_C3541330	-	796	751	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → prfA (PRK00591)PCRf (pfam03462) →
env-110	SRS063932_LANL_scaffold_97365	+	249	294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → PrfA (COG0216)prfA (PRK00591) →
env-111	SRS019128_C4186243	+	134	179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bin-1-1	NZ_CP006018.1	-	1292657	1292613	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRf (pfam03462) → HemK (COG2890)PRK09328 (PRK09328) →
env-112	HBC_scaff_10011399	-	3944	3900	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)PCRf (pfam03462) →
env-113	HBC_ctgs_1009601	+	1655	1699	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)PCRf (pfam03462) → PRK05567 (PRK05567)CBS_pair_IMP DH (cd04601) →
Bco-1-1	NZ_CP007287.1	-	1328201	1328157	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRf (pfam03462) → HemK (COG2890)PRK09328 (PRK09328) →
Bco-2-1	NZ_JDUF01000003.1	+	212969	213013	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRf (pfam03462) → HemK (COG2890)PRK09328 (PRK09328) →

env-114	AF_2010_repIIA01.1248365	-	214	164	RNA → ←-hypo
env-115	AF_2010_repIIA1.10264337	-	138	88	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-116	_GX4IIKE02HM9I2	-	308	260	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sro-4-1	NZ_ABYX02000001.1	+	5513786	5513833	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ssp-18-1	NZ_AWOQ01000221.1	+	3075	3122	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sro-2-1	NZ_DS999644.1	+	5470394	5470441	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sgl-4-1	NZ_JNZK01000005.1	+	91932	91979	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sal-8-1	NZ_JNWW01000013.1	+	257612	257659	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sgl-2-1	NZ_JH689271.1	-	192859	192812	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sgr-12-1	NZ_JOGA01000014.1	-	269813	269766	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ssp-55-1	NZ_JNLT01000003.1	-	25808	25761	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ssp-62-1	NZ_JPWVW01000002.1	+	1728736	1728783	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ssp-167-1	NZ_LAVK01000634.1	-	420	376	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sav-3-1	NZ_JOEK01000002.1	-	249434	249391	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ssp-4-1	NZ_ALNP01000028.1	+	19225	19269	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sxi-2-1	NZ_CP009922.2	+	4411426	4411470	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ssp-90-1	NZ_JOIG01000006.1	+	162280	162324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Jal-1-1	NZ_LBMC01000041.1	+	84087	84134	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ ECA_wecA (TIGR02380)GT_WecA_like (cd06853)→ hypo→ Atp12 (COG5336)→ PRK05815 (PRK05815)ATP-synt_A (pfam00119)→ PRK06876 (PRK06876)AtpE (COG0636)→ PRK05759 (PRK05759)AtpF (COG0711)→ PRK13430 (PRK13430)OSCP (pfam00213)→ AtpA (COG0056)PRK09281 (PRK09281)→ PRK05621 (PRK05621)ATP-synt (pfam00231)→
env-117	JGI20183J14883_110497	+	278	327	RNA → ←-hypo
env-118	JGI20181J14860_1000476	+	1897	1946	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-119	JGI20198J14950_1000651	-	1554	1505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-120	JGI20200J14955_1000024	+	14466	14515	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-121	JGI20201J14949_1011227	+	406	455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-122	JGI20202J14951_1000077	+	2663	2712	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-123	JGI20197J15001_1017583	+	314	363	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-124	JGI20197J15136_1017583	+	314	363	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-125	R_ear_cream-WUGI_scaffold_53252	-	122	77	RNA →
Pav-2-1	NZ_AOUA01000299.1	+	6067	6112	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pav-1-1	NC_021064.1	+	1037423	1037468	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-5-1	NZ_KI515688.1	-	2409959	2409914	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-3-1	NZ_KI515696.1	-	178310	178265	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-2-1	NZ_KI518468.1	+	147059	147104	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-4-1	NZ_AXMH01000003.1	-	663366	663321	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-1-1	NZ_KE340299.1	-	2592352	2592307	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-126	JGI12397J12024_1115564	+	10	52	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pac-1-1	NZ_JIAI01000013.1	-	168551	168505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-127	JGI24736J21556_1166172	+	166	205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-128	JGI12467J12023_1013674	+	485	531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-129	JGI12271J12027_1096703	+	1	47	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-130	JGI12397J12024_1040638	+	77	125	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-131	JGI12273J12029_10103667	+	517	565	RNA →
env-132	JGI24770J26754_10130366	-	170	134	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-133	JGI20200J14955_1003644	+	1490	1528	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-134	JGI20201J14949_1077705	+	89	127	RNA → hypo→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-135	JGI20202J14951_1033931	+	287	325	RNA → ←-hypo
Bth-2-1	NZ_JGZS01000003.1	+	338005	338048	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsc-1-1	NZ_JULC01000081.1	+	2980	3024	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bth-7-1	NZ_JDUB01000001.1	+	171828	171872	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

Bth-8-1	NZ_JHWM01000001.1	-	74179	74133	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bth-1-1	NC_020546.1	-	1607274	1607228	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bth-5-1	NZ_AUF101000006.1	+	346383	346427	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bth-4-1	NZ_JGZT01000005.1	+	346830	346874	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bth-5-2	NZ_JDFO01000003.1	+	250962	251006	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bth-3-1	NZ_JDTQ01000009.1	+	58022	58066	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bth-6-1	NZ_JGZV01000001.1	-	350252	350208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bbo-2-1	NZ_JHWO01000001.1	-	219911	219867	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bbo-2-2	NZ_JDUH01000006.1	-	219494	219450	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bbo-1-1	NZ_JGYQ01000016.1	-	219470	219426	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-136	3300001592_10065837	-	1863	1818	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nsp-4-1	NC_008699.1	+	1862060	1862105	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-137	AP72_2010_repI_A10_1095182	-	366	312	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-138	JGI12075J13256_1008725	-	141	76	RNA →
env-139	CEOS01170558.1	-	194	129	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-140	JGI12064J13199_110746	-	352	287	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-141	P3_CLC_Con13751	-	1150	1079	RNA → ←PRK15098 (PRK15098)BglX (COG1472)
env-142	Cons65214	+	22	93	RNA → ←PRK15098 (PRK15098)BglX (COG1472)
Fsp-8-1	NZ_ATXA01000002.1	+	22334	22383	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-143	JGI12635J15846_10174018	+	8	48	RNA → hypo → DUF4387 (pfam14330) → MhpC (COG0596)menH_SHCHC (TIGR03695) →
Nsp-10-1	NZ_JIAV01000021.1	+	30441	30487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
env-144	JGI12273J12029_10078345	+	11	81	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cja-1-1	NZ_JNXY01000008.1	+	8604	8652	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Fsy-1-1	NC_015656.1	-	4523128	4523080	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Fco-1-1	NZ_JWIO01000003.1	+	248178	248226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-145	JGI24770J26754_10245837	+	73	125	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)PCRF (pfam03462) →
Ply-1-1	NZ_KE150269.1	-	1488609	1488566	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo → AtpI2 (COG5336)ATPase_gene1 (pfam09527) → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK07874 (PRK07874)AtpE (COG0636) → PRK05759 (PRK05759)AtpF (COG0711) → AtpH (COG0712)PRK13430 (PRK13430) → AtpA (COG0056)PRK09281 (PRK09281) → PRK05621 (PRK05621)ATP-synt (pfam00231) → AtpD (COG0055)PRK09280 (PRK09280) →
Psp-7-1	NZ_AZIS01000003.1	+	159103	159146	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo → AtpI2 (COG5336)ATPase_gene1 (pfam09527) → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK07874 (PRK07874)AtpE (COG0636) → PRK05759 (PRK05759)AtpF (COG0711) → AtpH (COG0712)PRK13430 (PRK13430) → AtpA (COG0056)PRK09281 (PRK09281) → PRK05621 (PRK05621)ATP-synt (pfam00231) → AtpD (COG0055)PRK09280 (PRK09280) →
Ply-2-1	NZ_KE384026.1	-	390464	390421	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo → AtpI2 (COG5336)ATPase_gene1 (pfam09527) → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK07874 (PRK07874)AtpE (COG0636) → PRK05759 (PRK05759)AtpF (COG0711) → AtpH (COG0712)PRK13430 (PRK13430) → AtpA (COG0056)PRK09281 (PRK09281) → PRK05621 (PRK05621)ATP-synt (pfam00231) → AtpD (COG0055)PRK09280 (PRK09280) →
Ssc-2-1	NZ_KB889571.1	+	220	266	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sri-4-1	NZ_JNWX01000074.1	+	10628	10672	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sri-2-1	NZ_JMGX01000008.1	+	10567	10611	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Kau-1-1	NZ_LGUY01000019.1	-	4086	4042	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-156-1	NZ_JOCC01000117.1	-	4095	4051	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-2	NZ_JOEO01000027.1	-	93461	93417	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-3	NZ_JNYK01000063.1	-	4106	4062	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-4	NZ_JOBN01000051.1	-	4141	4097	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-5	NZ_JOCL01000019.1	-	93576	93532	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-6	NZ_JOCR01000115.1	-	4074	4030	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-7	NZ_JOCO01000065.1	+	10588	10632	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-8	NZ_JOBS01000027.1	-	93497	93453	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-157-1	NZ_JOCH01000101.1	-	4120	4076	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sca-5-1	NZ_JNWP01000078.1	-	4108	4064	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sca-5-2	NZ_JOFM01000099.1	-	4116	4072	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-9	NZ_JOBT01000405.1	+	10576	10620	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-10	NZ_JOCM01000066.1	-	4088	4044	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-11	NZ_JOCP01000071.1	-	4099	4055	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-12	NZ_JNYR01000048.1	-	4090	4046	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sla-2-3	NZ_JOEX01000083.1	-	4150	4106	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sla-2-4	NZ_JOCN01000068.1	+	10603	10647	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-1-1	NZ_ANSJ01000029.1	-	26110	26066	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-3-1	NZ_JJNO01000011.1	+	11204	11248	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-2-2	NZ_JMGY01000002.1	+	188935	188979	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-13	NZ_JOET01000092.1	-	4083	4039	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sgr-6-1	NZ_LGUW01000086.1	-	3993	3949	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-14	NZ_JOBV01000024.1	+	10595	10639	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-15	NZ_JOES01000028.1	-	85329	85285	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-16	NZ_JOBP01000025.1	-	87385	87341	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-17	NZ_JOJJ01000030.1	+	10597	10641	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-75-1	NZ_JNWN01000030.1	+	10583	10627	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Spe-2-1	NZ_JOCK01000033.1	+	10581	10625	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-18	NZ_JOCQ01000154.1	-	4106	4062	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-19	NZ_JOBW01000113.1	+	10576	10620	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sri-4-20	NZ_JOBO01000026.1	+	10605	10649	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
env-146	JGI24739J22299_10113857	+	487	535	RNA→	PRK10959 (PRK10959)→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)→
env-147	JGI24738J21930_10012013	-	456	408	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)→
env-148	JGI24737J22298_10573430	+	283	331	RNA→	hypo→		
Nal-1-1	NZ_AUFN01000010.1	-	437447	437399	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
env-149	JGI25160J50197_1029009	-	1165	1120	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Shy-1-1	NZ_GG657754.1	-	3705640	3705595	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→ rpmE (PRK00019)
Ssp-36-1	NZ_GG770539.1	-	1908349	1908302	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)→
Ssp-109-1	NZ_JOG001000006.1	-	20265	20218	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-35-1	NZ_ADXA01000073.1	-	20808	20761	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→ rpmE (PRK00019)
Ssp-37-1	NZ_GG657742.1	+	5431603	5431650	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→ rpmE (PRK00019)
Ssp-34-1	NZ_ADXB01000013.1	-	18515	18468	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→ rpmE (PRK00019)
Ssp-42-1	NZ_CM001165.1	-	2277919	2277872	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→ rpmE (PRK00019)
env-150	FWIREIOz_GKZ9IRQ02HYXXR	+	135	179	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Mau-2-1	NZ_CVQQ01000029.1	+	46091	46143	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
env-151	JGI26341J46601_10001885	-	1722	1672	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
env-152	JGI26340J50214_10000427	-	14824	14774	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
env-153	JGI12397J12024_1078638	+	4	59	RNA→	← hypo		
Psp-10-1	NZ_KE386835.1	-	170013	169972	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
env-154	JGI24739J22299_10349184	-	302	261	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
env-155	JGI24737J22298_10666825	-	244	203	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→

env-156	FIHLEPW02SY4CH	-	297	256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-157	JGI20208J14878_1015464	-	754	701	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-158	JGI20207J14881_1024728	-	493	439	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-159	JGI20206J14855_1162051	-	92	38	RNA → ← hypō
env-160	JGI20208J14878_1000138	+	14241	14295	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Mha-1-1	NZ_KB903880.1	-	18836	18779	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-161	JGI12635J15846_10811506	+	158	208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-162	JGI12712J15308_10934693	-	161	94	RNA → hypō →
env-163	JGI12271J12027_1083783	+	20	68	RNA → hypō → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-164	JGI12397J12024_1053925	+	25	70	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asp-5-1	NZ_AYXG01000169.1	+	21786	21823	RNA → efflux_EmrB (TIGR00711)MFS_1 (pfam07690) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-165	JGI24740J21852_10368802	+	100	168	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nlu-1-1	NZ_JZDQ01000313.1	+	1229	1274	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nba-1-1	NZ_GL873266.1	+	198527	198572	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Ssp-177-1	NZ_LAND01000002.1	-	44421	44376	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lal-1-1	NZ_KB903833.1	-	501554	501506	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gma-1-1	NZ_BAOP01000039.1	-	23950	23903	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bme-1-1	NZ_JGZC01000003.1	+	96433	96480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bme-2-1	NZ_JDTL01000009.1	-	12355	12308	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsu-2-1	NZ_AUFH01000003.1	-	180572	180527	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsu-1-1	NZ_JGZR01000005.1	-	181538	181493	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsu-2-2	NZ_JDXT01000010.1	+	15308	15353	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bre-1-1	NZ_JGZK01000017.1	+	179460	179506	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bre-1-2	NZ_JDUW01000013.1	+	107	153	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-34-1	NZ_JGZA01000001.1	+	95476	95522	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-35-1	NZ_JDUC01000003.1	+	20722	20768	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-30-1	NZ_KE145398.1	-	59671	59625	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-18-1	NC_014169.1	-	1896650	1896604	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-20-1	NZ_CP008885.1	-	1899429	1899383	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-21-1	NZ_ATWX01000002.1	-	62575	62529	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-166	SRS020869_C3365636	-	215	169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-22-1	NZ_CCWR01000010.1	+	9996	10042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-22-2	NZ_CCWS01000010.1	+	10024	10070	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-22-3	NZ_CCWU01000013.1	+	9992	10038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-22-4	NZ_CCWP01000016.1	+	10004	10050	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-22-5	NZ_CCWO01000014.1	+	10001	10047	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-22-6	NZ_CCWQ01000012.1	+	10020	10066	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-22-7	NZ_CCWN01000013.1	+	10016	10062	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-22-8	NZ_CCWT01000014.1	+	10021	10067	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-23-1	NZ_JDTT01000014.1	-	70968	70922	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-6-1	NC_011593.1	+	649451	649497	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-7-1	NC_0117219.1	+	649243	649289	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-167	BABF01008774.1	-	974	928	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-168	scaffold29315_2_MH0086	-	681	635	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-169	SRS018133_C4548354	-	305	259	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-170	scaffold19704_2_O2.UC-23	-	9273	9227	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-171	scaffold19269_2_V1.UC-14	-	1535	1489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-172	scaffold21097_2_V1.UC-15	-	760	714	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-173	scaffold17503_1_V1.UC-18	+	2099	2145	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-174	scaffold52336_3.V1.UC-6	+	189	235	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-175	4491422.3_NODE.2100	+	169	215	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-176	DLF009_scaffold9111.2	+	197	243	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-177	DLM001_scaffold39319.11	-	1511	1465	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-178	longitudinal_276_85	-	13590	13544	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-179	longitudinal_277_74	-	54531	54485	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-180	longitudinal_455_238	+	17104	17150	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-181	longitudinal_456_166	+	17071	17117	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-182	longitudinal_457_211	+	244972	245018	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-183	longitudinal_458_181	+	17074	17120	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-184	longitudinal_459_243	+	17138	17184	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-185	longitudinal_512_194	-	163136	163090	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-186	longitudinal_513_220	+	245449	245495	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-187	longitudinal_514_219	+	245293	245339	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-188	longitudinal_515_8	+	17141	17187	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-189	longitudinal_516_182	-	163739	163693	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-190	longitudinal_517_226	-	112586	112540	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-191	longitudinal_518_210	-	116768	116722	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-192	ADJS01003337.1	-	8514	8468	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-193	ADJT01002401.1	+	120384	120430	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-194	SRS018656_C1658316	+	203	249	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-195	SRS020328_C2846861	-	160	114	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-1-1	NZ_AQGL01000009.1	-	343420	343374	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-22-9	NZ_CDPT01000001.1	-	1421625	1421579	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-15-1	NZ_CALH01000107.1	-	4653	4607	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-31-1	NZ_JNWD01000001.1	+	233485	233531	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-28-1	NZ_JNVY01000019.1	+	152362	152408	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-24-1	NZ_JNWB01000013.1	-	17648	17602	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-29-1	NZ_JNWA01000011.1	+	218140	218186	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-11-1	NZ_AJTJ01000037.1	-	10590	10544	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-12-1	NZ_AJTI01000029.1	+	4915	4961	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-26-1	NZ_JNVX01000017.1	-	233903	233857	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-25-1	NZ_JGYZ01000008.1	-	522649	522603	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-9-1	NZ_DS990240.1	+	132343	132389	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-1-1	NZ_GL622628.1	-	22265	22219	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-3-1	NZ_CM002287.1	-	1828371	1828325	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-14-1	NC_014656.1	+	2156860	2156906	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-17-1	NC_015067.1	-	1854923	1854877	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-33-1	NZ_CP006741.1	-	1917232	1917186	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-16-1	NC_021008.1	-	314812	314766	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-25-2	NZ_JRWN01000004.1	+	171999	172045	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-196	BABC01009804.1	-	850	804	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Blo-19-1	NC_017221.1	+	433187	433233	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-197	hgutS8_s8_172738	-	762	716	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-198	BABE01000068.1	-	9777	9731	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-199	scaffold8513_5_MH0012	+	1213	1259	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-200	DLF013_scaffold22032.2	-	754	708	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-201	DLM012_scaffold9385.5	+	30093	30139	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-202	DLM018_scaffold48944.2	-	1497	1451	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-203	DOF008_scaffold17675.1	-	57046	57000	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-204	longitudinal_33_209	+	102094	102140	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-205	longitudinal_34_64	+	102147	102193	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-206	longitudinal_35_67	-	79278	79232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-207	longitudinal_36_6	-	79301	79255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-208	longitudinal_37_110	-	139321	139275	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-209	longitudinal_59_157	+	17124	17170	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-210	longitudinal_60_167	+	21344	21390	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-211	longitudinal_94_39	-	19572	19526	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-212	longitudinal_95_34	+	21350	21396	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-213	longitudinal_96_7	+	102094	102140	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-214	SRS017103_C2706015	-	215	169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-215	SRS052697_LANL_scaffold_51199	+	934	980	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-13-1	NZ_AJTM01000062.1	-	86722	86676	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-27-1	NZ_JNVZ01000015.1	+	229769	229815	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-32-1	NZ_JNWC01000023.1	-	297292	297246	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-10-1	NZ_AJTF01000083.1	+	25032	25078	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-4-1	NC_004307.2	+	2130767	2130813	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-8-1	NZ_GG666850.1	+	218460	218506	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-5-1	NC_015052.1	-	1885479	1885433	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-216	BABF01010041.1	+	452	498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-217	SRS016517_C20400143	-	363	317	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-218	SRS016495_LANL_scaffold_979	+	781	827	RNA →
Blo-2-1	NC_010816.1	+	2243300	2243346	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-219	JGI24738J21930_10111851	+	341	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-47-1	NZ_JALM01000005.1	+	11373	11411	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → CpdA (COG1409) → hypo → HicB (COG1598)HicB (pfam05534) →
Sma-2-1	NZ_KB905458.1	-	174655	174617	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Nrh-1-1	NZ_JOAJ01000005.1	+	675604	675651	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Nrh-1-2	NZ_JOEJ01000005.1	-	16032	15985	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Nte-2-1	NZ_BAGJ01000039.1	+	21259	21306	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) →
Nsp-2-1	NZ_KB907310.1	+	750500	750547	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
env-220	JGI12635J15846_10443042	+	326	380	RNA → ← hypo
env-221	JGI12467J12023_1172356	+	9	51	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-222	JGI12397J12024_1008566	+	21	63	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRf (smart00937)RF-1 (pfam00472)PCRf (pfam03462) →
env-223	JGI24741J21665_1049030	+	81	179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)PCRf (pfam03462) →
env-224	JGI24740J21852_10229407	+	87	185	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-225	JGI12397J12024_1078760	+	13	60	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-226	JGI12396J12026_1036873	+	11	61	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-227	FNTS_GKKEVUV01A6HR7	+	259	297	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-228	JGI12396J12026_1167238	+	15	53	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-229	JGI12396J12026_1310149	+	19	57	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-230	Incfw_1020660	+	204	250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-231	JGI12273J12029_10368297	+	4	44	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-232	JGI24735J21928_10783078	+	165	212	RNA → hypo →
env-233	JGI12272J11983_1065882	+	43	88	RNA → ← hypo
env-234	JGI12397J12024_1021578	+	17	62	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-235	JGI12271J12027_1090917	+	17	62	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-236	JGI12273J12029_10052257	+	17	62	RNA → ← hypo
Fsp-3-1	NC_007777.1	-	4454117	4454072	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Fsp-15-1	NZ_JENI01000016.1	+	11880	11925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Fsp-11-1	NZ_JDWE01000027.1	+	11908	11953	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Fsp-12-1	NZ_JPGU01000036.1	-	33938	33893	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Fsp-10-1	NZ_JPHT01000022.1	-	73950	73905	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Fsp-4-1	NZ_AYTZ01000024.1	+	10131	10176	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssy-1-1	NZ_JNYO01000029.1	-	44929	44889	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-54-1	NZ_KE384522.1	-	215499	215455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-174-1	NZ_JNIH01000045.1	+	12803	12848	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-32-1	NZ_BARG01000069.1	-	93141	93096	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sxy-1-1	NZ_JNWO01000024.1	-	100532	100487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-237	JGI12396J12026_1094817	+	15	73	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-238	JGI12467J12023_1044130	+	19	77	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-239	JGI12273J12029_10045587	+	359	415	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-240	JGI24740J21852_10734288	-	137	91	RNA → ←-hypo
Ssp-102-1	NZ_JOFZ01000002.1	+	291142	291188	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sca-3-1	NZ_LFXA01000015.1	+	32879	32925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ghi-1-2	NZ_ATVK01000007.1	+	35312	35358	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ghi-1-1	NZ_BANT01000013.1	+	35312	35358	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssc-5-1	NZ_JOEI01000009.1	-	442082	442036	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sro-5-1	NZ_JOFL01000017.1	+	10548	10594	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sva-2-1	NZ_JOBFO1000022.1	+	129517	129563	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sva-2-2	NZ_JOFN01000033.1	+	33993	34039	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sye-1-1	NZ_JQNR01000005.1	+	2828881	2828928	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-241	JGI12397J12024_1054783	+	54	105	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
env-242	JGI12272J11983_1231162	+	43	94	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nex-1-1	NZ_BAFZ01000027.1	+	22758	22807	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Nar-1-1	NZ_BAFR01000040.1	+	1958	2005	HemK (COG2890)PRK09328 (PRK09328) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Nab-1-1	NZ_BAFP01000034.1	+	43181	43230	HemK (COG2890)PRK09328 (PRK09328) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Mar-1-1	NZ_JALN02000001.1	+	4095907	4095961	HemK (COG2890)PRK09328 (PRK09328) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
env-243	JGI24770J26754_10202382	+	361	403	GT_WecA_like (cd06853)mraY (PRK00108) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-244	FWIRElOz_GKZ9IRQ02H6XIE	-	268	216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-245	JGI26342J46808_1002686	-	1270	1220	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-246	JGI26344J46810_1010675	-	505	455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-247	JGI26347J50199_1039997	-	278	228	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Agl-1-1	NZ_KB903307.1	-	53455	53386	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Msp-15-1	NZ_LBEW01000064.1	-	15115	15060	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)PRK15119 (PRK15119) → GT_WecA_like (cd06853)PRK15119 (PRK15119) →
Mco-2-1	NZ_CCBB010000001.1	-	249287	249232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)PRK15119 (PRK15119) →
env-248	JGI12688J13320_109532	-	138	89	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-249	JGI24735J21928_10093269	+	384	441	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)PCRF (pfam03462) →
Nmu-1-1	NC_013235.1	+	2318949	2318997	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-250	JGI12635J15846_13193507	-	158	97	RNA → hypo →
env-251	JGI20241J16302_100838	+	402	463	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-252	JGI20235J16296_1030653	-	332	271	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-253	C688J13580_1073401	+	297	353	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-254	JGI12397J12024_1051954	+	41	127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-255	C688J13580_1242542	-	139	84	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-256	JGI12397J12024_1036663	+	40	82	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-257	JGI12396J12026_1028942	+	39	125	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462) →
env-258	JGI12397J12024_1014281	+	48	131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)PCRF (pfam03462) →
env-259	JGI24735J21928_10543660	-	202	156	RNA → ←hypo
env-260	_GVICOHK01AHWYS	-	222	178	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-261	CTBMPR_c14314	+	184	228	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-262	JGI12420J12819_1024840	+	306	350	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-263	JGI12397J12024_1056172	+	36	78	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-264	JGI24739J22299_10632192	-	277	228	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-265	topACOD_FV90NF401CWY9R	+	385	428	RNA →
env-266	JGI24735J21928_10186907	+	96	140	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)PCRF (pfam03462) →
Nth-1-1	NZ_BAGK01000052.1	+	1741	1791	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pan-1-1	NZ_JOFP01000001.1	-	15114	15064	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
Nas-1-1	NZ_BAFO02000037.1	+	210935	210985	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
Sxi-1-1	NZ_JH636049.1	+	3421640	3421684	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) → hypo →
Ssa-1-1	NZ_KB912602.1	-	65465	65418	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Mch-1-1	NC_018027.1	-	3984376	3984325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-267	SRS015947_C1328584	-	203	156	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-268	SRS013170_Baylor_scaffold_89712	+	115	162	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-269	SRS015574_WUGC_scaffold_15753	+	130	177	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-270	SRS017227_Baylor_scaffold_82921	+	846	893	RNA →
env-271	SRS022149_LANL_scaffold_16970	+	119	166	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-272	SRS023964_C2397974	-	196	149	RNA → ←hypo
env-273	SRS055378_LANL_scaffold_81766	+	131	178	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-274	SRS044366_WUGC_scaffold_3585	+	105	152	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-275	SRS017304_C1861044	-	118	71	RNA → rpmE (PRK00528)rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-276	SRS024289_C1901398	+	126	173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-277	SRS024649_C3463797	-	196	149	RNA → ←hypo
env-278	SRS058053_C5176642	-	196	149	RNA → ←hypo
Age-1-1	NZ_KE386871.1	-	110335	110288	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pas-1-1	NZ_AUII01000018.1	-	64638	64580	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
Pdi-1-1	NC_015312.1	+	1759317	1759374	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
env-279	FNTS067_GKA24FP01DWQJ8	-	109	66	RNA → ←hypo
env-280	_GX4IIKE01BKU07	+	30	75	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
Ame-4-2	NZ_CP009110.1	+	1382283	1382334	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462) →
Ame-4-1	NZ_AQUL01000001.1	+	6275366	6275417	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462) →
Asp-4-1	NZ_AFWY03000007.1	+	215866	215917	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462) →
Ath-1-1	NZ_KI421511.1	-	4345617	4345566	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462) →
Sbi-1-1	NC_016582.1	-	4870714	4870670	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Shy-4-1	NZ_JOIK01000001.1	+	665887	665931	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-73-1	NZ_LAKD01000061.1	+	86684	86728	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sir-1-1	NZ_LK022848.1	-	4236123	4236079	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-165-1	NZ_JABQ01000013.1	-	32688	32644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Svi-3-1	NC_015957.1	+	1549091	1549136	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-281	FNTS_GKKEVUV01CU0U2	-	207	156	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-282	JGI24736J21556_1245205	+	19	73	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-283	JGI20205J14842_1000519	+	3917	3979	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-284	JGI20206J14855_1026724	+	110	172	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-285	JGI20188J14859_1000358	+	3928	3990	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-286	JGI20204J15000_1155101	+	129	191	RNA →
env-287	JGI20204J15135_1155101	+	129	191	RNA →
env-288	JGI12396J12026_1106282	+	35	77	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-289	4491734.3.10488814	-	168	123	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-290	JGI20163J15578_11401153	+	94	155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gar-1-1	NZ_BAEE01000076.1	+	38199	38249	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → GlyA (COG0112)glyA (PRK00011) → GT_WecA_like (cd06853)mraY (PRK00108) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo → hypo →
Mro-1-1	NZ_JNZQ01000027.1	-	31420	31342	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-291	JGI12271J12027_1030093	+	10	56	RNA → ←hypo
env-292	JGI12273J12029_10015673	+	375	422	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psu-1-1	NZ_KE384020.1	-	789516	789467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → hypo → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)PRK15119 (PRK15119) → hypo → AtpI2 (COG5336) → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK07874 (PRK07874)AtpE (COG0636) → PRK05759 (PRK05759)AtpF (COG0711) → AtpH (COG0712)PRK13430 (PRK13430) → AtpA (COG0056)PRK09281 (PRK09281) → PRK05621 (PRK05621)ATP-synt (pfam00231) → AtpD (COG0055)PRK09280 (PRK09280) →
Gne-1-1	NZ_AEUD01000002.1	+	368326	368371	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsi-1-1	NZ_BANU01000014.1	-	24449	24403	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsi-2-1	NZ_JZDP01000041.1	-	24646	24600	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nta-1-1	NZ_BAGG01000023.1	+	33157	33212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-293	JGI24737J22298_11161458	+	91	139	RNA → ←hypo
env-294	JGI12419J13241_1001214	-	1703	1660	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-295	JGI24739J22299_10027406	+	1671	1722	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-296	JGI24735J21928_10050545	-	1004	953	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRf (smart00937)PCRf (pfam03462) →
env-297	JGI24738J21930_10034417	-	910	859	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRf (smart00937)PCRf (pfam03462) →
env-298	2044439917	-	59	9	RNA → hypo →
Mob-1-1	NZ_LAUZ02000011.1	+	54331	54383	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Mob-1-2	NZ_JYNU01000003.1	+	194583	194635	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-299	DCrCPGB_c366807	+	142	208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asp-1-1	NC_021191.1	-	8063566	8063525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
env-300	JGI12397J12024_1258028	+	36	84	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-301	JGI12396J12026_1152696	+	33	81	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-302	JGI12397J12024_1022450	+	5	53	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-303	JGI12396J12026_1048802	+	4	52	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
Nsp-6-1	NZ_KI519393.1	-	15320	15272	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
env-304	JGI12662J13196_1036374	+	59	111	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-305	JGI12630J15595_10065573	-	185	133	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-306	JGI12701J14581_1053699	-	204	152	RNA → ←hypo
env-307	JGI12635J15846_10023607	+	2592	2644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-308	JGI24739J22299_10989154	+	71	123	RNA → ←hypo

env-309	JGI24737J22298_10504981	-	264	212	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-310	JGI24735J21928_10176247	+	442	488	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-311	JGI24738J21930_10548350	+	122	176	RNA→	←hypo
env-312	JGI12654J13325_1015162	-	201	152	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-313	JGI12630J15595_10385291	+	47	96	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-314	JGI20163J15578_11533527	+	79	130	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ami-1-1	NC_017093.1	-	7818806	7818758	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
env-315	JGI12397J12024_1010539	+	13	58	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-316	JGI12271J12027_1149268	+	10	55	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-317	JGI12273J12029_10077712	+	13	58	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
env-318	DCrCPGB_c531990	-	129	85	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-319	JGI12273J12029_10731265	+	11	55	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-320	JGI12272J11983_1298237	+	5	49	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-321	JGI12397J12024_1066331	+	11	55	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ prfA (PRK00591)PCRF (pfam03462)→
Nni-1-1	NZ_BAGC01000013.1	+	24797	24839	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Nsp-8-1	NZ_JQJL01000005.1	+	229229	229271	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-322	JGI26055J44792_1072012	+	221	266	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Rsp-20-1	NZ_JMLQ01000015.1	-	17505	17461	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Rsp-16-1	NZ_JXQS01000036.1	-	17102	17058	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Mpu-1-1	NZ_JOEU01000058.1	-	20946	20882	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Msp-27-1	NZ_KK037233.1	+	5461529	5461593	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
env-323	JGI24735J21928_10524408	-	73	31	RNA→	
env-324	ARMCC_Contig_460253	+	48	90	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Aal-1-1	NZ_KB892745.1	+	20751	20792	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→
env-325	JGI20200J14955_1003645	-	246	200	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-326	JGI20200J14955_1019771	+	167	213	RNA→	←hypo
env-327	JGI20200J14955_1023045	-	263	217	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-328	JGI20202J14951_1002967	-	251	205	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-329	JGI20198J14950_1057835	+	78	124	RNA→	←hypo
env-330	JGI24735J21928_10184830	-	549	503	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-331	JGI24739J22299_10397894	+	86	132	RNA→	←hypo
env-332	JGI24737J22298_10271796	-	450	404	RNA→	←hypo
env-333	JGI12467J12023_1177552	+	17	100	RNA→	←hypo
env-334	JGI12272J11983_1096727	+	28	109	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-335	JGI24735J21928_10002808	+	5639	5690	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-336	JGI24737J22298_10862154	-	237	199	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-337	JGI25321J50212_10143090	+	305	354	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-338	4491734.3.365955	-	183	127	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bts-1-1	NZ_JGZU01000002.1	+	80841	80886	RNA→	←hypo
Bts-2-1	NZ_JDTR01000003.1	+	80645	80690	RNA→	←hypo
Bts-2-2	NZ_AUCL01000004.1	+	80936	80981	RNA→	←hypo
Ama-5-1	NZ_AWOO02000022.1	+	110008	110077	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-339	JGI20163J15578_11194518	+	309	354	RNA→	
env-340	JGI12712J15308_10985252	+	184	237	RNA→	←hypo
env-341	botACOD_GAKN62C01DMNDD	+	189	242	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-342	JGI12420J12819_1025726	+	200	254	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-343	JGI12273J12029_10026616	+	9	57	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-344	FNTS_GKKEVUV02IK9X6	-	344	296	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-345	JGI12397J12024_1004279	+	17	65	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
Mva-1-1	NZ_JH814692.1	+	273119	273170	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ ECA_wecA (TIGR02380)GT_WecA_like (cd06853)→

Mru-1-1	NZ_JROA01000001.1	-	4191975	4191924	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Mva-2-1	NC_008726.1	-	4654670	4654618	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Mau-3-1	NZ_HG964453.1	+	57934	57986	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Mgi-1-1	NC_009338.1	+	2399433	2399484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Mgi-2-1	NC_014814.1	+	1769516	1769567	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-346	2200268977	-	11805	11751	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-347	2200159822	-	2727	2673	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-348	JGI1358J11329_10025592	+	1331	1398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nas-2-1	NZ_BAFS01000060.1	+	2797	2847	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Mab-65-1	NZ_JMIA01000002.1	+	750325	750361	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mch-2-1	NZ_CP010946.1	+	1349878	1349914	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
env-349	JGI26345J50200_1206263	+	102	156	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-350	JGI12396J12026_1038988	+	59	128	RNA → ←-hypo
Fsp-7-1	NC_014666.1	+	1161289	1161336	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
Sca-1-1	NZ_KB911608.1	-	87758	87712	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssv-1-1	NZ_CM000951.1	+	6314528	6314574	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
Ssp-50-1	NZ_JTIY01000001.1	-	828848	828802	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-19-1	NZ_KE150433.1	-	83516	83470	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aro-1-1	NZ_KI632511.1	-	5249323	5249275	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sca-2-1	NC_016111.1	+	4478364	4478410	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sca-2-2	NC_017586.1	+	4478172	4478218	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nvi-1-1	NZ_BAGN01000056.1	+	32207	32254	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-351	BICA1_1000552	+	2686	2734	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-352	JGI12675J13321_109048	+	170	222	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-353	JGI26342J46808_1016646	+	241	293	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-354	JGI26345J50200_1290574	+	128	180	RNA →
env-355	JGI12713J13577_1075251	+	94	146	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-356	JGI12669J13542_130180	-	221	169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-357	JGI12712J15308_10002766	-	597	545	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-358	JGI12659J15293_10130778	-	420	368	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-359	JGI12635J15846_10434338	+	340	392	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-360	JGI26347J50199_1038113	-	440	388	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-361	JGI12668J13544_1081006	-	183	131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-362	JGI26337J50220_1123253	+	72	124	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-363	JGI12712J15308_10042764	+	278	330	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-364	JGI12699J13341_100212	-	1510	1458	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-365	JGI26338J50219_1041585	-	309	257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Mim-1-1	NZ_JXUU01000007.1	-	15102	15062	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-73-1	NZ_AUVF01000002.1	+	521591	521631	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-2	NZ_CSZN01000002.1	-	459458	459418	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-3	NZ_CSYW01000003.1	-	506431	506391	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-4	NZ_CSXQ01000001.1	-	309290	309250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-5	NZ_CSWA01000004.1	-	506374	506334	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-6	NZ_CSYH01000003.1	-	506327	506287	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-7	NZ_CSZC01000001.1	-	742902	742862	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-8	NZ_CSXA01000001.1	+	162315	162355	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-9	NZ_CSXG01000001.1	+	162314	162354	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-10	NZ_CSWO01000003.1	-	506432	506392	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-11	NZ_CSXV01000002.1	-	197279	197239	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-12	NZ_CSYY01000002.1	-	459141	459101	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-13	NZ_CSXN01000003.1	-	506492	506452	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-14	NZ_CSXO01000001.1	-	506300	506260	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-15	NZ_CSZL01000002.1	-	506309	506269	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-16	NZ_CSXB01000001.1	-	309269	309229	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-17	NZ_CSXU01000001.1	-	742819	742779	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-18	NZ_CSZA01000001.1	-	742884	742844	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →

Mab-1-19	NZ_CSJY01000002.1	-	698905	698865	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-20	NZ_CSU01000004.1	+	10612	10652	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-21	NZ_CSUQ01000003.1	+	10596	10636	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-22	NZ_CSUX01000003.1	+	475932	475972	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-23	NZ_CSUD01000003.1	-	309291	309251	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-24	NZ_CSVO01000002.1	-	459138	459098	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-25	NZ_CSVF01000001.1	-	459123	459083	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-26	NZ_CSVJ01000002.1	-	506338	506298	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-27	NZ_CSXF01000002.1	-	506190	506150	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-28	NZ_CSWJ01000002.1	-	506432	506392	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-29	NZ_CSWG01000004.1	-	309142	309102	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-30	NZ_CSXC01000001.1	-	310020	309980	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-31	NZ_CSXT01000001.1	-	445981	445941	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-32	NZ_CSXP01000001.1	-	1200434	1200394	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-33	NZ_CSXI01000001.1	+	244753	244793	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-34	NZ_CSXR01000001.1	-	818533	818493	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-35	NZ_CSVD01000002.1	-	699015	698975	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-36	NZ_CSVE01000001.1	+	148660	148700	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-37	NZ_CSXC01000001.1	-	786146	786106	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →

Mab-1-38	NZ_CSUB01000002.1	-	622023	621983	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-39	NZ_CSVC01000026.1	-	62798	62758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-40	NZ_CSUE01000001.1	-	309387	309347	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-41	NZ_CSUK01000001.1	+	382760	382800	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-42	NZ_CSVI01000002.1	+	162256	162296	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-43	NZ_CSVH01000001.1	-	786306	786266	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-44	NZ_CSTR01000001.1	+	245392	245432	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-45	NZ_CSUL01000001.1	-	309282	309242	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-46	NZ_CSVW01000021.1	-	62685	62645	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-47	NZ_CSUJ01000001.1	-	506352	506312	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-48	NZ_CSZY01000003.1	-	506245	506205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-49	NZ_CSTV01000001.1	-	309289	309249	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-50	NZ_CSZE01000002.1	-	506271	506231	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-51	NZ_CSTG01000003.1	+	162313	162353	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-52	NZ_CSVT01000001.1	-	685006	684966	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-53	NZ_CSYN01000001.1	-	310020	309980	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-54	NZ_CSUV01000003.1	-	309253	309213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-55	NZ_CSYG01000003.1	-	415344	415304	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-56	NZ_CSYZ01000001.1	-	506610	506570	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →

Mab-1-57	NZ_CSUT01000001.1	-	621986	621946	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-58	NZ_CSZI01000001.1	-	309973	309933	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → hypo → hypo →
Mab-1-59	NZ_CSUS01000001.1	-	353814	353774	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-60	NZ_CSWU01000006.1	-	248462	248422	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-61	NZ_CSZU01000001.1	+	162316	162356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-62	NZ_CSXW01000004.1	-	506373	506333	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-63	NZ_CSYT01000002.1	-	506484	506444	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-64	NZ_CSWQ01000004.1	-	506673	506633	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-65	NZ_CSYY01000003.1	-	506329	506289	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-66	NZ_CSTZ01000001.1	+	476370	476410	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-67	NZ_CSZF01000003.1	+	162311	162351	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → hypo →
Mab-1-68	NZ_CSXJ01000004.1	-	506351	506311	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-69	NZ_CSZV01000002.1	+	162295	162335	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-70	NZ_CSTT01000001.1	+	930033	930073	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-71	NZ_CSZQ01000006.1	-	248596	248556	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-72	NZ_CSXM01000002.1	-	501635	501595	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-73	NZ_CSUC01000001.1	-	1714344	1714304	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-74	NZ_CSXZ01000001.1	-	893217	893177	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-75	NZ_CSXV01000002.1	-	786397	786357	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →

Mab-1-76	NZ_CSUZ01000001.1	-	506435	506395	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-77	NZ_CSWM01000002.1	-	506367	506327	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-78	NZ_CSXI01000001.1	-	248627	248587	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-79	NZ_CSUM01000001.1	+	245392	245432	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-80	NZ_CSWP01000004.1	-	313093	313053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-81	NZ_CSXD01000003.1	-	506396	506356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-82	NZ_CSVQ01000001.1	-	459269	459229	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-83	NZ_CSZJ01000001.1	-	385149	385109	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-84	NZ_CSZB01000001.1	+	163125	163165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-85	NZ_CSZR01000001.1	+	244744	244784	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-86	NZ_CSXI01000003.1	-	506355	506315	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-87	NZ_CSXV01000002.1	-	1045594	1045554	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-88	NZ_CSXW01000002.1	+	309303	309343	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-89	NZ_CSXZ01000001.1	-	445930	445890	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-90	NZ_CSXE01000001.1	-	786209	786169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-91	NZ_CSXW01000003.1	-	742881	742841	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-92	NZ_CSXW01000002.1	-	506308	506268	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-93	NZ_CSZY01000004.1	-	21804	21764	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-94	NZ_CSYP01000001.1	+	941699	941739	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →

Mab-1-95	NZ_CSWF01000002.1	-	506495	506455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-96	NZ_CSXY01000002.1	+	162311	162351	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-97	NZ_CSZD01000002.1	+	162313	162353	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-98	NZ_CSUO01000001.1	-	308185	308145	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-99	NZ_CSVK01000004.1	-	506337	506297	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-100	NZ_CSQY01000001.1	+	422078	422118	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-101	NZ_CSXQ01000001.1	-	896926	896886	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-102	NZ_CSXK01000002.1	-	506652	506612	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-103	NZ_CSXS01000003.1	-	506296	506256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-104	NZ_CSYA01000001.1	+	244753	244793	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-105	NZ_CSXB01000001.1	-	506499	506459	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-106	NZ_CSZH01000001.1	-	625398	625358	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-107	NZ_CSXE01000001.1	+	244753	244793	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-108	NZ_CSYO01000001.1	-	309254	309214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-109	NZ_CSZG01000009.1	-	21110	21070	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-110	NZ_CSZR01000003.1	-	459464	459424	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-111	NZ_CSZM01000004.1	-	132560	132520	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-112	NZ_CSUF01000001.1	-	445936	445896	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-113	NZ_CSTF01000001.1	-	309258	309218	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →

Mab-57-1	NZ_ATFQ01000015.1	+	135878	135918	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-9-1	NZ_AGQU01000002.1	+	364967	365007	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-17-1	NZ_AKTY01000002.1	+	656984	657024	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-38-1	NZ_AJSE01000006.1	-	848090	848050	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-37-1	NZ_AJSD01000001.1	+	321157	321197	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-49-1	NZ_AKUU01000002.1	+	437326	437366	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-45-1	NZ_AKUJ01000002.1	+	812189	812229	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-16-1	NZ_AKTX01000002.1	+	136662	136702	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-52-1	NZ_AKUW01000004.1	+	53562	53602	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-32-1	NZ_AKVR01000005.1	-	756739	756699	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-31-1	NZ_AJLZ01000010.1	+	127082	127122	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-23-1	NZ_AKUD01000004.1	-	490418	490378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-47-1	NZ_AKUL01000001.1	+	920827	920867	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-22-1	NZ_AKUC01000004.1	+	136640	136680	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-20-1	NZ_AKUB01000002.1	+	136706	136746	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-19-1	NZ_AKUA01000003.1	+	136653	136693	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-48-1	NZ_AKUN01000002.1	+	437379	437419	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-35-1	NZ_AJMA01000004.1	-	313058	313018	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-50-1	NZ_AKUM01000002.1	+	611330	611370	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →

Mab-51-1	NZ_AKUV01000004.1	+	437347	437387	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-53-1	NZ_AKUO01000005.1	+	53563	53603	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-44-1	NZ_AKUI01000002.1	+	376605	376645	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-18-1	NZ_AKTZ01000005.1	+	437892	437932	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-36-1	NZ_AKVU01000008.1	-	313101	313061	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-46-1	NZ_AKUK01000006.1	+	53546	53586	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-21-1	NZ_AKUQ01000005.1	+	54178	54218	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-58-1	NZ_AJSC01000002.1	-	671044	671004	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-42-1	NZ_AYTF01000002.1	+	1614438	1614478	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → hypo →
Mab-64-1	NZ_JAOW01000004.1	+	209627	209667	Rfe (COG0472) → GT_WecA_like (cd06853)mraY (PRK00108)other_trbK (TIGR04360) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-66-1	NZ_JAOV01000001.1	+	1212907	1212947	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-54-1	NC_021282.1	+	1470196	1470236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-70-1	NZ_CP009616.1	-	3353449	3353409	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-70-2	NZ_CP009615.1	-	3353238	3353198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-75-1	NC_018150.2	-	3353484	3353444	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → hypo → hypo → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-71-1	NZ_CP009447.1	-	3228707	3228667	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-33-1	NZ_AKVV01000125.1	+	9758	9798	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → hypo → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-61-1	NZ_AJLY02000020.1	+	60826	60866	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-41-1	NZ_AYTA01000006.1	+	3199797	3199837	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →

Mab-55-1	NZ_AHAS01000006.1	+	474490	474530	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-114	NZ_CSZT01000025.1	-	39697	39657	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-115	NZ_CSXD01000003.1	-	317249	317209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-116	NZ_CSXL01000001.1	-	399190	399150	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-117	NZ_CSXX01000001.1	-	143542	143502	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-118	NZ_CSYS01000007.1	+	148924	148964	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-119	NZ_CSZR01000007.1	-	132076	132036	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → hypo → hypo → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-120	NZ_CSWC01000003.1	+	10427	10467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-121	NZ_CSUY01000001.1	-	1112929	1112889	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-122	NZ_CSU01000006.1	+	149331	149371	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-123	NZ_CSYP01000002.1	-	294347	294307	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-124	NZ_CSWK01000002.1	-	294251	294211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-125	NZ_CSTX01000003.1	+	10449	10489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-126	NZ_CSUP01000002.1	-	294322	294282	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-127	NZ_CSWL01000001.1	-	742508	742468	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-128	NZ_CSVB01000002.1	-	294465	294425	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-129	NZ_CSTU01000051.1	-	20787	20747	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-130	NZ_CSTO01000003.1	-	317251	317211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-131	NZ_CSVA01000001.1	-	740453	740413	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →

Mab-1-151	NZ_CSUA01000006.1	-	299395	299355	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-152	NZ_CSVG01000002.1	-	294334	294294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-153	NZ_CSWS01000002.1	-	132041	132001	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-154	NZ_CSUW01000002.1	-	143911	143871	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-155	NZ_CSVR01000004.1	+	266215	266255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-156	NZ_CSZO01000004.1	-	132026	131986	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → hypo → hypo → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-157	NZ_CSZW01000003.1	-	132152	132112	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-158	NZ_CSWE01000001.1	+	657102	657142	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-159	NZ_CSZX01000001.1	-	143534	143494	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-160	NZ_CSWN01000005.1	-	143616	143576	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-161	NZ_CSXT01000008.1	-	144962	144922	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-162	NZ_CSZS01000012.1	-	49634	49594	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-163	NZ_CSYL01000003.1	+	261973	262013	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-164	NZ_CSWH01000005.1	-	299304	299264	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-165	NZ_CSTP01000002.1	-	317144	317104	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-43-1	NZ_AUMY01000010.1	+	60813	60853	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-5-1	NZ_AKVA01000006.1	+	237374	237414	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-8-1	NZ_AKVC01000005.1	+	141628	141668	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-14-1	NZ_AKTV01000003.1	+	395176	395216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →

Mab-12-1	NZ_AKUT01000005.1	+	138569	138609	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-11-1	NZ_AKVE01000002.1	+	138525	138565	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-7-1	NZ_AKVB01000004.1	+	141663	141703	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-10-1	NZ_AKVD01000003.1	+	1145427	1145467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-4-1	NZ_AKUZ01000006.1	+	53482	53522	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-13-1	NZ_AKTU01000004.1	+	395153	395193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-6-1	NZ_AKUP01000009.1	+	141650	141690	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-3-1	NZ_AKUY01000014.1	+	53426	53466	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-2-1	NZ_AKUX01000006.1	+	141637	141677	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-27-1	NZ_AKUS01000005.1	+	141661	141701	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-26-1	NZ_AKUR01000007.1	+	141644	141684	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-15-1	NZ_AKTW01000001.1	+	847452	847492	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-40-1	NZ_AJGG01000034.1	-	91946	91906	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-39-1	NZ_AJGF01000010.1	+	316074	316114	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-28-1	NZ_AKUG01000004.1	+	141618	141658	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-34-1	NZ_AKVT01000011.1	-	15076	15036	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-29-1	NZ_AKUH01000010.1	+	53471	53511	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-24-1	NZ_AKUE01000004.1	+	53462	53502	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-25-1	NZ_AKUF01000006.1	+	464209	464249	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →

Mka-1-1	NZ_JASX01000032.1	+	142131	142171	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853)other_trbK (TIGR04360) →
Mab-67-1	NZ_JAOU01000003.1	+	1978072	1978112	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-62-1	NZ_JAOY01000001.1	+	3994798	3994838	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-68-1	NZ_JAOT01000003.1	+	174381	174421	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mch-3-1	NZ_JAOI01000002.1	-	111334	111294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-1	NC_010397.1	+	1446856	1446896	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-60-1	NZ_HE817967.1	+	1449314	1449354	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-30-1	NZ_KB290571.1	+	2284355	2284395	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-1-166	NZ_LGCJ01000014.1	+	53469	53509	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-71-2	NZ_CP009613.1	+	1445609	1445649	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-72-1	NZ_CP009407.1	+	1431380	1431420	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-71-3	NZ_CP009408.1	+	1446345	1446385	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-69-1	NZ_CP012044.1	+	1577915	1577955	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-59-1	NZ_JAOF01000001.1	+	1494986	1495026	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-63-1	NZ_JAOX01000001.1	+	2028893	2028933	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mfo-2-1	NZ_JASW01000013.1	-	78048	78008	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853)other_trbK (TIGR04360) →
Mma-1-1	NZ_AHAR01000007.1	+	396447	396487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)RF_mod_PrmC (TIGR03534) → HemK (COG2890)RF_mod_PrmC (TIGR03534) → HemK (COG2890)Methyltransf_25 (pfam13649) → HemK (COG2890)Methyltransf_25 (pfam13649) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →

Mab-56-1	NZ_AKVF01000003.1	+	670171	670211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Mab-74-1	NZ_AP014547.1	+	1453421	1453461	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
env-366	JGI12273J12029_10114025	+	13	58	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-367	JGI12396J12026_1204897	+	52	134	RNA → ← hypō
env-368	FNTS_GKKEVUV02IFQEU	-	183	146	RNA → hypō →
env-369	JGI20243J16304_127292	-	275	225	RNA → ← hypō
Tsp-1-1	NZ_HE997626.1	-	24625	24578	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
Tpa-1-1	NC_014158.1	+	1269385	1269433	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
Are-1-1	NZ_JZKF01000016.1	+	13468	13514	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Nca-3-1	NZ_JOAG01000005.1	-	167647	167606	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
env-370	botACOD_FV90NF402IKWZZ	+	231	268	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-371	JGI24735J21928_10271683	-	398	355	RNA → hypō →
Mph-1-1	NZ_AJFJ01000049.1	-	15218	15165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-372	JGI12635J15846_10020978	+	510	564	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-373	JGI12682J13319_1038893	+	14	68	RNA → ← hypō
env-374	JGI12714J13572_1002355	-	413	359	RNA → ← hypō
env-375	JGI12668J13544_1058045	+	205	259	RNA → hypō →
env-376	JGI12712J15308_10190831	-	84	30	RNA → ← hypō
env-377	JGI12630J15595_10175159	-	290	236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-378	JGI12682J13319_1063338	+	232	286	RNA →
env-379	JGI20180J14839_1008125	+	143	208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-380	JGI12712J15308_10202108	-	470	415	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgr-9-1	NZ_JOBE01000014.1	-	122236	122189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Sex-1-1	NZ_JOFB01000019.1	+	104773	104820	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Sex-1-2	NZ_JNZP01000018.1	-	213017	212970	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Sex-2-1	NZ_AZSS01000360.1	-	24911	24864	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) →
Ssp-115-1	NZ_JOGX01000011.1	-	107370	107323	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) →
Ssp-105-1	NZ_JOHZ01000002.1	+	13150	13197	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) →
Mgl-2-1	NZ_JOFO01000002.1	-	183750	183703	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) →
Sgr-12-2	NZ_JNZT01000101.1	-	3778	3731	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) →
Sgr-12-3	NZ_JOEN01000032.1	-	52357	52310	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) →
Fsp-14-1	NZ_KQ031391.1	-	2026125	2026078	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →

Fsa-1-1	NZ_KI912266.1	+	2655277	2655323	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gar-2-1	NZ_AXWO01000001.1	-	345857	345815	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → LMWpc (smart00226)Wzb (COG0394) → hypo →
Spa-31-1	NZ_AZWJ01000013.1	+	135671	135726	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-19-1	NZ_KB900388.1	-	2477139	2477084	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-3-1	NZ_KB894983.1	-	51486	51431	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-39-1	NZ_AUKU01000004.1	-	50781	50726	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-29-1	NZ_AZVZ01000001.1	+	325608	325663	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-26-1	NZ_AZWE01000001.1	-	50846	50791	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-23-1	NZ_AZWP01000001.1	+	356983	357038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-22-1	NZ_AZWN01000007.1	+	156487	156542	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-37-1	NZ_KI911485.1	-	160156	160101	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-16-1	NZ_KB905359.1	+	4219288	4219343	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-40-1	NZ_KB897477.1	-	50762	50707	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-14-1	NZ_KB897006.1	-	50602	50547	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-35-1	NZ_AZWM01000001.1	-	50720	50665	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-12-1	NZ_KB896839.1	+	419496	419551	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-25-1	NZ_AZWC01000002.1	-	50728	50673	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-34-1	NZ_AZVW01000001.1	-	50891	50836	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-21-1	NZ_AZWO01000001.1	+	372780	372835	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-1-1	NZ_KB904824.1	-	50851	50796	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nfa-1-1	NC_006361.1	+	1164117	1164159	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Msp-7-1	NC_008146.1	-	4140648	4140593	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Msp-5-1	NC_009077.1	-	4101693	4101638	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Msp-6-1	NC_008705.1	-	4175130	4175075	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Msp-19-1	NZ_JQKU01000014.1	+	205976	206017	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Mll-1-1	NZ_JXST01000033.1	-	15173	15132	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Msp-3-1	NZ_KB911477.1	+	59673	59714	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Msp-20-1	NZ_JMLM01000001.1	-	15820	15779	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Nsp-7-1	NZ_JOJF01000034.1	-	15463	15396	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Nve-1-1	NZ_BAGM01000030.1	+	22539	22606	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → hypo → hypo → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Nao-1-1	NZ_BAFQ01000044.1	+	45685	45752	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Nce-1-1	NZ_BAFW01000042.1	+	8980	9047	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
env-381	HBC_scaff_10249466	+	482	527	RNA →

env-382	HBC_scaff_10219859	-	180	135	RNA→
env-383	HBC_ctgs_1182059	-	180	135	RNA→
Bas-2-1	NZ_KQ033859.1	-	419564	419519	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-384	HBC_scaff_10141359	-	127	82	RNA→ hypo→
env-385	HBC_ctgs_1281286	-	127	82	RNA→ hypo→
env-386	HBC_scaff_10035491	+	3410	3455	RNA→
env-387	HBC_scaff_10160097	-	295	250	RNA→ CBS (smart00116)IMPDPH (pfam00478)CBS (pfam00571)→
env-388	HBC_ctgs_1268800	+	249	294	RNA→
env-389	HBC_ctgs_1257867	-	295	250	RNA→ CBS (smart00116)IMPDPH (pfam00478)CBS (pfam00571)→
env-390	HBC_ctgs_1141466	+	482	527	RNA→
Bas-1-1	NC_018720.1	-	1594861	1594816	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bas-3-1	NZ_JDTU01000007.1	+	50715	50760	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bas-2-2	NZ_KQ033885.1	-	1408476	1408431	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-3-1	NZ_AWUO01000001.1	-	280667	280622	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-391	BGMT1_NODE_527181	-	9150	9105	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-392	HBC_scaff_10281629	+	636	681	RNA→
env-393	HBC_ctgs_1093268	+	636	681	RNA→
env-394	HBC_scaff_10015902	-	112	67	RNA→
env-395	HBC_ctgs_1269501	+	204	249	RNA→
env-396	HBC_scaff_10298050	-	68	23	RNA→
env-397	HBC_ctgs_1066607	-	68	23	RNA→
Bsp-2-1	NZ_AWUN01000004.1	-	167539	167494	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bas-2-3	NZ_KQ034040.1	-	1594375	1594330	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Mma-2-1	NZ_CCBF01000004.1	-	15106	15057	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ GT_WecA_like (cd06853)mraY (PRK00108)→
Msp-2-1	NZ_KB892705.1	+	457958	457995	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ GT_WecA_like (cd06853)mraY (PRK00108)→
env-398	JGI24736J21556_1296931	-	194	150	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-399	JGI24735J21928_10389060	+	23	67	RNA→ ←hypo
Nji-1-1	NZ_BAGB01000018.1	+	17431	17475	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Nno-1-1	NZ_CP006850.1	+	1393179	1393243	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Nhi-1-1	NZ_BAGA01000038.1	+	57963	58015	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Msp-1-1	NZ_KB908258.1	-	178589	178551	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ GT_WecA_like (cd06853)mraY (PRK00108)→
Msp-18-1	NZ_AUWS01000091.1	+	11274	11310	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ ECA_wecA (TIGR02380)GT_WecA_like (cd06853)→
Mfo-1-1	NZ_JH814764.1	-	15543	15500	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Msp-25-1	NZ_CP009914.1	-	4482052	4482009	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Mvu-1-1	NZ_CCBG010000002.1	+	2131282	2131325	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ GT_WecA_like (cd06853)mraY (PRK00108)→
Mse-1-1	NZ_LD001000024.1	+	85147	85190	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Mse-1-2	NZ_LDPU01000001.1	+	5382278	5382321	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Mco-1-1	NZ_LFOD01000024.1	+	84808	84851	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Mfa-1-1	NZ_HG964484.1	+	494652	494695	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Msp-23-1	NZ_AUEQ01000008.1	+	477987	478030	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ GT_WecA_like (cd06853)mraY (PRK00108)→

Mse-2-1	NZ_HG322952.1	-	15319	15283	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Mse-3-1	NZ_JTJW01000009.1	-	15412	15343	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Mse-3-2	NZ_JTLZ01000009.1	-	15489	15420	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Msp-22-1	NZ_JIAW01000013.1	+	210744	210800	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
Mne-1-1	NZ_LK021339.1	+	855681	855737	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Mne-2-1	NZ_JMDW01000012.1	-	14937	14881	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-400	botACOD_F64RS5002I4I65	+	261	317	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Msp-21-1	NZ_JQLT01000006.1	+	352100	352156	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Sal-7-1	NZ_CP010519.1	-	2455492	2455447	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Szi-1-1	NZ_AGBF01000094.1	-	21824	21778	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-17-1	NZ_CM002271.1	-	1971747	1971701	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-30-1	NZ_CM002273.1	-	2012002	2011956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-52-1	NZ_JTCK01000075.1	+	132364	132410	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-13-1	NZ_KB898222.1	-	216996	216950	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-66-1	NZ_KN549149.1	-	230060	230014	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgr-12-4	NZ_JOGU01000005.1	+	127939	127985	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-63-1	NZ_LAYX01000047.1	-	37184	37138	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-33-1	NZ_FR873700.1	-	1935399	1935353	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-117-1	NZ_JOHX01000005.1	-	52128	52082	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Swa-1-1	NZ_JHDU01000001.1	-	64349	64303	RNA → hypo → hypo →
Sal-1-1	NC_020990.1	-	1754401	1754355	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgr-12-5	NZ_JNZI01000004.1	-	84767	84721	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgr-12-6	NZ_JOGN01000003.1	-	52139	52093	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-83-1	NZ_JOGQ01000004.1	+	154867	154913	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-26-1	NZ_KB890732.1	+	167437	167483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sal-4-1	NZ_JOI01000005.1	+	181272	181318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-123-1	NZ_KL591007.1	-	217831	217785	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgr-2-1	NZ_GG657758.1	-	2542467	2542421	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sco-3-1	NC_021985.1	+	5785307	5785353	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-67-1	NZ_LARV01000129.1	+	3104	3150	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-98-1	NZ_KL591912.1	+	85133	85179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-41-1	NZ_AGNH01000234.1	-	7103	7057	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-162-1	NZ_JOCG01000006.1	+	231677	231723	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-137-1	NZ_JOIZ01000006.1	+	380113	380159	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Slu-1-1	NZ_KN039947.1	-	1557714	1557668	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sga-2-1	NZ_JRHJ01000022.1	-	32900	32854	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) →
Sau-2-1	NZ_JNZD01000033.1	-	54400	54354	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-21-1	NZ_KB891850.1	+	297153	297200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Nvu-1-1	NZ_JNFP01000059.1	+	32133	32183	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Nbr-3-1	NZ_BAFT02000053.1	+	33276	33326	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Nbr-2-1	NZ_BAUA01000201.1	+	29549	29599	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Nbr-1-1	NC_018681.1	+	1432741	1432791	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Nte-1-1	NZ_BAGH01000084.1	+	1857	1906	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spr-2-1	NZ_BARF01000069.1	+	97	142	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-106-1	NZ_JNXE01000037.1	+	11799	11844	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-401	JGI24739J22299_10657377	+	184	230	RNA →
env-402	JGI24736J21556_1144543	-	314	268	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-403	JGI24739J22299_10005583	+	3113	3159	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-404	JGI24737J22298_10014880	+	59	105	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-405	JGI24735J21928_10026048	-	1497	1451	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-406	JGI24738J21930_10016695	+	1212	1258	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-146-1	NZ_JODC01000003.1	-	34066	34020	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Smi-1-1	NZ_KN050746.1	+	104683	104729	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sda-1-1	NC_020504.1	-	3469508	3469462	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-161-1	NZ_JOBZ01000107.1	+	4806	4852	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-71-1	NZ_LBDA01000053.1	+	10440	10486	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgr-7-1	NZ_JOFU01000018.1	-	82877	82831	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgl-3-1	NZ_CP009438.1	+	5215800	5215846	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-85-1	NZ_JOFW01000021.1	+	12706	12752	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-121-1	NZ_JOIU01000003.1	+	182946	182992	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-104-1	NZ_JOIA01000044.1	+	3117	3163	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-60-1	NZ_KI601353.1	-	78686	78640	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-72-1	NZ_LAVA01000109.1	-	30407	30361	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-99-1	NZ_JOHW01000005.1	+	528394	528440	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-89-1	NZ_JOIF01000027.1	+	9376	9423	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbi-2-1	NZ_JOFS01000024.1	-	108312	108266	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbi-2-2	NZ_JOFR01000024.1	-	108305	108259	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-82-1	NZ_JOGP01000011.1	-	82995	82949	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-3-1	NZ_KB911781.1	-	84488	84442	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sam-1-1	NZ_CP012382.1	+	5413021	5413067	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-108-1	NZ_JOHJ01000018.1	-	81408	81362	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-128-1	NZ_JOGT01000006.1	+	282015	282061	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-48-1	NZ_AUKV01000028.1	+	12811	12857	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-124-1	NZ_JOHU01000015.1	+	140224	140270	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sga-1-1	NZ_AOHP01000017.1	+	10282	10328	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-110-1	NZ_JOGJ01000004.1	-	81960	81914	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-140-1	NZ_KL585965.1	+	42291	42337	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-142-1	NZ_KL585205.1	-	33182	33136	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-139-1	NZ_JOCT01000023.1	+	96568	96614	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-107-1	NZ_JOHL01000041.1	-	81671	81625	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-112-1	NZ_JOGV01000023.1	-	19434	19388	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Svi-5-1	NZ_AMLP01000083.1	-	20043	19997	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-74-1	NZ_BBNN01000020.1	+	195717	195763	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sbo-1-1	NZ_KB405078.1	-	426028	425982	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbo-1-2	NZ_KB911581.1	+	1699487	1699533	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-407	JGI12419J13241_1020528	+	551	597	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-101-1	NZ_JOHV01000024.1	-	31603	31557	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-136-1	NZ_JOIY01000004.1	-	81877	81831	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sto-1-1	NZ_JFCB01000017.1	+	75109	75155	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sch-1-1	NZ_JH164850.1	-	42480	42434	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Saf-1-1	NZ_KE354178.1	+	20405	20451	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sva-1-1	NZ_JYJH01000019.1	+	85068	85114	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-7-1	NZ_JNXD01000019.1	+	86558	86604	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-154-1	NZ_KL579021.1	+	79524	79570	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sol-1-1	NZ_JJOH01000021.1	+	109043	109089	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-147-1	NZ_JODG01000016.1	-	75647	75601	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sia-1-1	NZ_JNXI01000026.1	-	85292	85246	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sro-1-1	NZ_CM002285.1	-	2981947	2981901	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Scy-3-1	NZ_CP010849.1	+	5238904	5238950	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sac-1-1	NZ_JODT01000015.1	+	134233	134279	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sla-3-1	NZ_JOBD01000030.1	+	53632	53678	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-160-1	NZ_JNXK01000056.1	+	9606	9652	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
San-1-1	NZ_LGUX01000300.1	-	86940	86894	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-160-2	NZ_JOCJ01000056.1	+	9610	9656	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-3-1	NZ_JOCU01000056.1	+	9567	9613	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-94-1	NZ_JOIC01000059.1	-	87663	87617	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-159-1	NZ_JOJH01000041.1	+	9637	9683	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-130-1	NZ_JOIV01000034.1	+	57899	57945	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-2-1	NZ_JNWW01000050.1	-	87704	87658	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-155-1	NZ_JOJG01000055.1	+	9473	9519	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Shy-2-1	NC_017765.1	+	7332293	7332339	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Shy-3-1	NC_020895.1	+	7026019	7026065	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-125-1	NZ_JOAW01000048.1	+	11208	11254	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Spe-1-1	NZ_KL575053.1	+	113652	113698	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-141-1	NZ_JOJB01000039.1	-	22019	21973	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Svi-14-1	NZ_LFNT01000024.1	-	76388	76342	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Svi-14-2	NZ_LGUR01000200.1	-	76304	76258	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Svi-14-3	NZ_LGUQ01000026.1	-	50743	50697	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Svi-4-1	NZ_GG657757.1	+	6015810	6015856	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-408	JGI25153J46596_10164792	-	356	310	RNA → ← hyp0
Sol-2-1	NZ_JOFH01000019.1	-	80214	80168	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kau-1-2	NZ_JODU01000015.1	-	85909	85863	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Svi-12-1	NZ_JODM01000021.1	+	27707	27753	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sco-1-1	NZ_AHGS01000015.1	-	31365	31319	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-58-1	NZ_APIV01000026.1	-	82178	82132	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sno-1-1	NZ_CP009313.1	+	5012088	5012134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sgr-1-1	NZ_AEYX01000041.1	+	322182	322228	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sce-1-1	NZ_JOEV01000019.1	-	107133	107087	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-176-1	NZ_JXWX01000006.1	-	87051	87005	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sco-2-1	NC_003888.3	+	5829950	5829996	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sli-2-1	NZ_GG657756.1	-	2654278	2654232	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sli-1-1	NZ_CM001889.1	+	5849426	5849472	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sli-2-2	NZ_CP009124.1	-	2688989	2688943	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Svi-11-1	NZ_JOCE01000023.1	+	20903	20949	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-118-1	NZ_JNXF01000037.1	+	33108	33153	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Ssp-120-1	NZ_JOHP01000066.1	-	29002	28957	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-76-1	NZ_JNZW01000021.1	-	92544	92499	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-119-1	NZ_JOHS01000019.1	+	33159	33204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Svi-11-2	NZ_JODI01000003.1	+	207039	207085	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgr-12-7	NZ_JOJE01000033.1	+	28750	28796	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssc-4-1	NZ_JODX01000005.1	-	199204	199158	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-69-1	NZ_JUIG01000017.1	+	189710	189755	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spl-1-1	NZ_JTDH01000035.1	+	15585	15630	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spl-1-2	NZ_JUIF01000051.1	-	80126	80081	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-153-1	NZ_JOCA01000016.1	+	83466	83511	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sye-2-1	NZ_JNWJ01000028.1	+	22848	22893	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sse-1-1	NZ_JNXP01000009.1	+	359142	359189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfu-2-1	NZ_JOEY01000004.1	-	144771	144725	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sdu-1-1	NZ_JNXR01000028.1	-	85192	85146	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sip-1-1	NZ_AEJC01000389.1	+	1739	1785	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssc-3-1	NZ_KL997422.1	+	1322338	1322384	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-59-1	NZ_LACL01000016.1	-	93527	93481	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-70-1	NZ_LBMU01000062.1	-	24986	24941	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-24-1	NZ_KB891987.1	+	887555	887601	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-10-1	NZ_KB846749.1	-	16622	16576	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-11-1	NZ_KB898297.1	-	18791	18745	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-53-1	NZ_KI911521.1	-	22367	22321	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sni-2-1	NZ_CM002280.1	-	2660451	2660406	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spr-1-1	NZ_CM000950.1	-	2585594	2585547	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-134-1	NZ_JOCB01000025.1	-	28339	28293	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sau-1-1	NZ_JOAP01000030.1	-	60155	60109	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) → etp (PRK11391)Wzb (COG0394) →
Sau-1-2	NZ_JOAR01000022.1	-	60248	60202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) → etp (PRK11391)Wzb (COG0394) →
Asp-7-1	NZ_JOGW01000010.1	+	24341	24387	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sal-5-1	NZ_JNXT01000031.1	+	28596	28642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) → etp (PRK11391)Wzb (COG0394) →
Sru-2-1	NZ_JODN01000034.1	+	28596	28642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) → etp (PRK11391)Wzb (COG0394) →
Sru-2-2	NZ_JOAQ01000034.1	+	28596	28642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) → etp (PRK11391)Wzb (COG0394) →
Svi-2-1	NZ_ASHX01000001.1	-	682175	682129	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Stu-1-1	NZ_AEJB01000521.1	+	12742	12788	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-1	NZ_AJJM01000112.1	+	4156	4202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spu-1-1	NZ_KB913030.1	+	5096632	5096678	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-12-1	NZ_KB897776.1	-	219651	219605	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-78-1	NZ_JOJM01000058.1	-	37844	37798	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-158-1	NZ_JOCD01000378.1	-	4063	4017	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-79-1	NZ_JOHG01000018.1	-	89216	89169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Svi-10-1	NZ_JNYP01000019.1	-	145314	145267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-92-1	NZ_JOIP01000013.1	+	94481	94528	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-113-1	NZ_JOHA01000008.1	-	84595	84548	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-93-1	NZ_JOIO01000009.1	+	238799	238846	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-114-1	NZ_JOHD01000020.1	-	25512	25465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Ssp-84-1	NZ_JOIH01000014.1	-	84509	84462	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sgr-13-1	NZ_JOFF01000006.1	+	316771	316818	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Spu-3-1	NZ_JOB01000002.1	-	133951	133904	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Spu-2-1	NZ_JOFA01000023.1	+	12247	12294	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sgr-12-8	NZ_JOIT01000013.1	-	26693	26646	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sfl-9-1	NZ_JOAC01000008.1	-	83545	83498	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Spu-2-2	NZ_JOAQ01000020.1	+	12247	12294	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Spu-3-2	NZ_JODK01000002.1	+	163658	163705	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sbr-1-1	NZ_JNXB01000002.1	-	133941	133894	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sca-4-1	NZ_KL573601.1	-	30459	30412	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sca-4-2	NZ_KL569933.1	+	21968	22015	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-151-1	NZ_JOCW01000015.1	-	159046	158999	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sgr-13-2	NZ_LGUZ01000018.1	-	139783	139736	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sgr-13-3	NZ_JOFE01000019.1	-	139769	139722	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sgr-13-4	NZ_JOFD01000010.1	+	270523	270570	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sgr-13-5	NZ_JODO01000012.1	-	158845	158798	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sat-2-1	NZ_JNXG01000002.1	+	1072335	1072381	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sfl-8-1	NZ_JOAB01000003.1	-	225755	225709	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-80-1	NZ_JOAE01000004.1	+	218001	218047	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-135-1	NZ_JOIW01000004.1	-	216825	216779	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sfl-1-1	NC_016114.1	-	2388748	2388702	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-29-1	NC_021055.1	+	5042406	5042452	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
[pa-1-1	NZ_JNYQ01000004.1	-	248335	248289	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sol-2-2	NZ_JNWM01000003.1	+	1016882	1016928	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sfu-3-1	NZ_JNXH01000004.1	-	245003	244957	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-126-1	NZ_KL589835.1	+	240377	240423	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sgr-11-1	NZ_JYBE01000037.1	+	33072	33119	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sme-1-1	NZ_JOJK01000017.1	+	272123	272170	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-14-1	NZ_KB890948.1	+	91657	91704	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-168-1	NZ_ARPF01000003.1	+	344832	344879	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-49-1	NZ_CBRG010000147.1	+	14666	14712	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-22-1	NZ_KB891605.1	+	147812	147858	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-23-1	NZ_KB891406.1	-	421246	421200	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-65-1	NZ_KI911349.1	+	1102284	1102330	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-64-1	NZ_AZVF01000001.1	-	420786	420740	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-25-1	NZ_KB891774.1	+	108968	109014	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-27-1	NZ_AQWQ01000004.1	-	409548	409502	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-152-1	NZ_KL585392.1	-	37506	37460	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ssp-57-1	NZ_AZVE01000001.1	-	87318	87272	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-163-1	NZ_JJOB01000001.1	+	4517158	4517204	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-40-1	NC_015953.1	+	5035066	5035112	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-15-1	NZ_ARPI01000001.1	-	414568	414522	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-6-1	NZ_KB892001.1	+	325904	325950	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sha-2-1	NZ_JOAZ01000017.1	+	419289	419335	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sgr-8-1	NZ_JOFC01000033.1	+	41970	42016	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-43-1	NZ_AGSW01000051.1	+	66077	66123	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Scy-2-1	NZ_JOEM01000014.1	-	146064	146018	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-39-1	NZ_KB891296.1	-	481794	481748	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sfu-1-1	NC_021177.1	+	5700829	5700875	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Sal-6-1	NZ_JNWU01000016.1	+	9488	9534	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-145-1	NZ_JOJC01000009.1	-	114395	114349	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Seu-1-1	NZ_KQ257779.1	-	81970	81924	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→

Sgr-3-1	NZ_GL877172.1	-	2772173	2772127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgr-4-1	NC_010572.1	-	2577363	2577317	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgr-12-9	NZ_JOBR01000007.1	-	141549	141503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-9-1	NZ_KB899000.1	-	100558	100512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-68-1	NZ_JXUQ01000001.1	+	5787746	5787792	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sal-8-2	NZ_JOED01000008.1	+	96199	96245	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sba-2-1	NZ_KL573542.1	-	304852	304806	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
San-2-1	NZ_JNXS01000009.1	-	156824	156778	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sod-1-1	NZ_LATD01000035.1	+	9464	9510	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Ssp-149-1	NZ_JODF01000062.1	+	10265	10311	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-4-1	NZ_AUBE01000011.1	-	189557	189511	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-127-1	NZ_JOGZ01000006.1	-	230008	229961	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-81-1	NZ_JOJO01000001.1	+	783410	783457	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sat-1-1	NZ_JQJU01000001.1	+	779795	779842	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-103-1	NZ_JOHR01000018.1	-	2619	2572	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nsp-3-1	NZ_KB822580.1	+	117055	117099	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-409	JGI20200J14955_1027293	-	434	379	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-410	JGI20202J14951_1065050	+	200	255	RNA →
env-411	JGI12273J12029_10877295	+	59	107	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-412	JGI12397J12024_1240506	+	83	131	RNA → ← hypo
env-413	JGI12467J12023_1032285	+	11	56	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-414	JGI12419J13241_1175342	+	100	140	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-415	JGI12419J13241_1307864	+	48	89	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-416	2200077197	+	8199	8240	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-417	ATED1026_F5B15RW01AGPIR	-	111	72	RNA → ← hypo
env-418	JGI12635J15846_12820982	+	23	77	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Svi-14-4	NZ_LGUP01000177.1	-	36425	36378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) → GlyA (COG0112)glyA (PRK00011) →
Swe-1-1	NZ_JNWK01000034.1	+	44732	44779	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) → GlyA (COG0112)glyA (PRK00011) →
Sve-1-1	NC_018750.1	+	5396901	5396948	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) → GlyA (COG0112)glyA (PRK00011) →
Ssp-38-1	NZ_AKXV01000009.1	-	392719	392672	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) → GlyA (COG0112)glyA (PRK00011) →
Sbi-3-1	NZ_JNWL01000038.1	+	44138	44185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) →
Sbi-3-2	NZ_JOAU01000021.1	-	158964	158917	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) →
Sbi-3-3	NZ_JNXJ01000039.1	+	44138	44185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) →
Sgl-4-2	NZ_JODW01000008.1	+	265005	265052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) →
Svi-9-1	NZ_CP010407.1	+	5717740	5717787	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → etp (PRK11391)Wzb (COG0394) →

Fsp-2-1	NZ_KB893751.1	+	18012	18059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Fsp-5-1	NC_009921.1	+	1192038	1192085	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
Fsp-1-1	NZ_KB891208.1	+	394290	394337	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Sgh-1-1	NZ_DS999641.1	-	2595981	2595934	RNA → lytR_cpsA_psr (TIGR00350)LytR_cpsA_psr (pfam03816) → lytR_cpsA_psr (TIGR00350)LytR_cpsA_psr (pfam03816) → lytR_cpsA_psr (TIGR00350)LytR_cpsA_psr (pfam03816) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Svi-6-1	NZ_JH993790.1	-	935516	935469	RNA → lytR_cpsA_psr (TIGR00350)LytR_cpsA_psr (pfam03816) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-31-1	NZ_KB892208.1	+	277710	277757	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-172-1	NZ_KK106988.1	+	976736	976783	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sav-2-1	NZ_JZJK01000090.1	+	1230456	1230503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sav-1-1	NC_003155.4	-	3644711	3644664	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sav-2-2	NZ_BAVY01000023.1	-	106591	106544	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-7-1	NZ_KB912967.1	-	88385	88338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-44-1	NZ_GG753626.1	+	4185762	4185809	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgr-10-1	NZ_KL503830.1	+	5116277	5116324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aac-1-1	NZ_JNYX01000011.1	-	75643	75596	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-173-1	NZ_JMLN01000029.1	+	12038	12085	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-16-1	NZ_KB891492.1	-	84534	84487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-61-1	NZ_LDZX01000024.1	+	53213	53260	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-175-1	NZ_JXTE01000072.1	-	30728	30681	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Fsp-6-1	NZ_ADGX01000178.1	+	1918	1965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Fsp-13-1	NZ_JYFN01000018.1	+	103666	103710	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Fal-1-1	NC_008278.1	-	6445775	6445731	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gte-4-1	NZ_KL571655.1	+	204281	204341	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gte-5-1	NZ_ATYW01000003.1	+	382145	382205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Mrh-1-1	NZ_AGIQ01000008.1	+	20388	20443	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-419	JGI24741J21665_1351754	+	186	229	RNA → hypo →
env-420	JGI24740J21852_10109780	-	353	310	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-421	JGI24741J21665_1395540	+	54	97	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-422	JGI24735J21928_11010882	-	166	123	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-423	JGI12269J14319_11006088	-	200	110	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-424	JGI20186J14852_1074806	+	71	122	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-425	JGI20188J14859_1014361	-	823	772	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-426	JGI20190J14840_1016465	+	35	86	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-427	JGI20208J14878_1005722	-	584	533	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nsp-11-1	NZ_LAVL01000009.1	-	3292	3249	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → hypo → hypo →
env-428	JGI26341J46601_10154785	-	301	238	RNA → hypo →
env-429	JGI26340J50214_10419594	+	13	52	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-430	JGI26340J50214_10140346	+	542	581	RNA →
env-431	JGI26341J46601_10019475	+	120	166	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-432	JGI26339J46600_10188658	+	54	100	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-433	JGI12712J15308_11072730	+	109	155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-434	JGI20133J14441_1007812	-	3380	3329	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → Rfc (COG0472) →

env-435	3300001422_101093	-	1365	1314	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Str-2-1	NZ_KB897247.1	-	51465	51408	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Str-1-1	NC_009380.1	-	4173707	4173650	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Str-3-1	NZ_KB897150.1	-	51556	51499	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Str-7-1	NZ_KI911454.1	+	198877	198934	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Str-10-1	NZ_KK211108.1	-	50876	50819	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Str-8-1	NZ_KK211120.1	-	51590	51533	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Str-9-1	NZ_AUKS01000011.1	-	51392	51335	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sar-29-1	NZ_AUEJ01000011.1	-	51474	51417	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Str-6-1	NZ_AZXH01000007.1	-	51265	51208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Str-4-1	NZ_AZXE01000005.1	-	51306	51249	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Str-5-1	NZ_AZXD01000012.1	-	51215	51158	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-24-1	NZ_KE384274.1	+	353881	353937	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-32-1	NZ_KI911397.1	+	504459	504515	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-20-1	NZ_KB900614.1	-	901662	901606	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-7-1	NZ_KB895231.1	+	38192	38248	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-6-1	NZ_KB895117.1	-	50778	50722	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-27-1	NZ_AZWB01000027.1	+	22264	22320	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-30-1	NZ_AZVY01000026.1	+	19243	19299	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-18-1	NZ_KB911579.1	-	914415	914359	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-17-1	NZ_KB913027.1	-	891436	891380	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-5-1	NZ_KB895050.1	+	20116	20172	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-4-1	NZ_KB894900.1	+	366858	366914	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-15-1	NZ_KB913022.1	-	4269511	4269555	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-38-1	NZ_AXVR01000016.1	+	40238	40293	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-436	JGI24770J26754_10002275	+	2336	2389	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Msp-11-1	NZ_CP011773.1	-	4667799	4667746	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-437	PCEOT_contig21592	+	631	671	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)PCRF (pfam03462) →
env-438	JGI26341J46601_10000390	+	11088	11139	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-439	JGI26340J50214_10007419	+	1129	1180	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-440	C688J13580_1085580	-	412	368	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-441	JGI26345J50200_1174654	-	161	109	RNA → ← hypo
env-442	JGI26341J46601_10705222	-	114	41	RNA → hypo →
Gkr-1-1	NZ_AQYG01000051.1	-	16795	16754	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-443	JGI24721J26819_10140833	-	944	893	RNA → ← hypo
env-444	JGI24721J44947_10027217	-	4805	4754	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-445	JGI24721J44947_10041083	-	3136	3085	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
env-446	JGI20262J16345_11379	-	97	56	RNA → hypo →
env-447	JGI12272J11983_1061016	+	13	57	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-448	JGI12467J12023_1038166	+	90	134	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-449	DCrCPGB_c205975	-	57	15	RNA →
Mhe-1-1	NZ_LDPO01000013.1	-	14940	14896	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Rrh-1-1	NZ_APMY01000113.1	+	67570	67615	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → EPS_sugtrans (TIGR03025) → hypo →

Msp-13-1	NZ_JRML01000027.1	+	41320	41371	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Mar-2-1	NZ_LASW02000025.1	+	41195	41246	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-450	2205805686	+	242	290	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-451	2158117515	+	242	290	RNA → ←hypo
Tbi-1-1	NZ_BAVQ01000020.1	-	15062	15016	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Msp-4-1	NC_015576.1	+	1383199	1383245	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Mav-1-1	NZ_AGAQ01000161.1	-	14730	14685	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Msp-16-1	NZ_JRMN01000077.1	+	14933	14979	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-452	JGI24770J26754_10065094	-	520	475	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRf (pfam03462)ABC_tran_CTD (pfam16326) →
Msp-12-1	NZ_JRMM01000124.1	-	7553	7509	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Msp-14-1	NZ_JRMM01000086.1	+	10717	10763	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Msp-17-1	NZ_AUWR01000034.1	+	51013	51059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-453	JGI25151J46595_10355844	+	12	67	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Mky-1-1	NZ_BBKA01000066.1	-	14976	14925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → hypo → hypo → SUA5 (COG0009)TIGR00057 (TIGR00057) → hypo → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sar-43-1	NZ_AZWW01000033.1	+	1603	1659	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sar-41-1	NZ_KI911429.1	+	150303	150359	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sar-42-1	NZ_KI911487.1	+	12550	12606	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sar-10-1	NZ_KB896245.1	-	51122	51066	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sar-11-1	NZ_KB896343.1	+	1657	1713	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-454	JGI12396J12026_1015431	+	45	84	RNA → hypo →
env-455	C688J13580_1520551	-	158	116	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-456	JGI24737J22298_11100121	-	70	27	RNA →
Ase-1-1	NZ_JOEG01000014.1	+	292419	292467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Fsp-9-1	NZ_CM001489.1	+	6555193	6555238	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-457	JGI12397J12024_1075610	+	11	62	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-458	JGI12273J12029_10446706	+	9	60	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-459	JGI12273J12029_10361449	-	52	1	RNA →
env-460	2044458367	-	94	11	RNA →
Spa-33-1	NZ_AZWQ01000015.1	+	224755	224811	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spa-2-1	NZ_KB894849.1	-	95011	94955	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vma-1-1	NC_015434.1	-	5587166	5587106	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Gbr-1-1	NC_013441.1	+	2009569	2009614	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gna-1-1	NZ_BAHE01000010.1	-	25454	25409	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gal-1-1	NZ_BACI01000100.1	+	69601	69646	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gal-2-1	NZ_KI629793.1	+	441597	441642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gal-3-1	NZ_HG764859.1	+	14350	14395	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gam-2-1	NZ_BANS01000028.1	+	75421	75466	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-1-1	NC_018581.1	+	2102127	2102172	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Gte-1-1	NZ_AQPW01000013.1	+	98992	99037	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gpa-1-1	NZ_BAOQ01000029.1	+	64185	64230	RNA → ←PRK06214 (PRK06214)SiR (cd06199)
Gru-1-1	NZ_BAHB01000043.1	+	60751	60796	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gam-3-1	NZ_AWTB01000003.1	+	200060	200105	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gte-3-1	NZ_JNXA01000016.1	-	25295	25250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gte-2-1	NZ_BAFD01000064.1	+	11988	12033	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nsp-1-1	NZ_KB911522.1	-	24205	24160	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Wsp-1-1	NZ_AYTE01000018.1	+	71375	71420	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kar-2-1	NZ_JNYV01000009.1	+	112546	112591	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Msp-30-1	NZ_JOAF01000010.1	+	112447	112492	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gef-1-1	NZ_BAEH01000017.1	-	16990	16945	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → GlyA (COG0112)glyA (PRK00011) → GT_WecA_like (cd06853)mraY (PRK00108) → GT_WecA_like (cd06853)mraY (PRK00108) → AnsP (COG1113)AA_permease_2 (pfam13520) → AnsP (COG1113)AA_permease_2 (pfam13520) → AnsP (COG1113)AA_permease_2 (pfam13520) →
env-461	AglA_G_F499EG101AZGLU	-	123	78	RNA →
Gpo-3-1	NC_016906.1	+	2046857	2046902	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gpo-2-1	NZ_BAEI01000018.1	-	30702	30657	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gpo-1-1	NZ_ARVZ01000001.1	-	3468004	3467959	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Grh-1-1	NZ_BAHC01000025.1	-	28381	28336	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-462	P3_CLC_Cons143904	+	638	680	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rde-1-1	NZ_JPOC01000028.1	-	15680	15635	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Req-3-1	NZ_APJC01000016.1	+	221235	221280	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Req-1-1	NC_014659.1	+	1850042	1850087	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Req-2-1	NZ_CM001149.1	-	1501379	1501334	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-463	JGI12060J13090_100106	+	585	630	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-464	JGI11829J13087_100888	+	1844	1889	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-465	JGI12027J13101_100505	+	2020	2065	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-466	JGI12209J13104_110011	+	138	183	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-467	JGI12064J13199_100272	+	1905	1950	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-468	JGI12075J13256_1000008	-	18327	18282	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-469	JGI12097J13213_1000024	+	50065	50110	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-470	JGI11758J13082_100031	-	5158	5113	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-471	JGI12112J13074_1000205	-	1882	1837	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-472	JGI11819J13099_103704	+	158	203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-473	JGI11800J13271_1007055	-	1039	994	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rfa-3-1	NZ_JMFE01000037.1	-	19407	19362	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → SHOCT (pfam09851) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → SHOCT (pfam09851) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → SHOCT (pfam09851) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Rsp-2-1	NZ_KB907581.1	+	121301	121346	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → SHOCT (pfam09851) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → SHOCT (pfam09851) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Rsp-1-1	NZ_KB911561.1	+	83738	83783	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → SHOCT (pfam09851) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Rfa-1-1	NZ_JOKB01000004.1	+	98966	99011	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → SHOCT (pfam09851) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →

Rfa-10-1	NZ_JMEX01000003.1	-	19312	19267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → SHOCT (pfam09851) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Rfa-11-1	NZ_JMEW01000005.1	-	19530	19485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → SHOCT (pfam09851) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Rfa-2-1	NZ_JMFF01000029.1	+	83922	83967	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → SHOCT (pfam09851) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Rsp-3-1	NZ_CAPS01000066.1	+	3310	3355	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Rfa-12-1	NZ_JMEV01000023.1	-	619554	619509	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Rsp-13-1	NZ_CP010797.1	+	262870	262915	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Rfa-5-1	NZ_JMFC01000001.1	+	66942	66987	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Rop-1-1	NC_012522.1	-	1262208	1262163	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Rjo-1-1	NC_008268.1	-	1564922	1564877	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK07874 (PRK07874)AtpE (COG0636) → PRK05759 (PRK05759)AtpF (COG0711) → AtpH (COG0712)PRK13430 (PRK13430) → AtpA (COG0056)PRK09281 (PRK09281) → AtpG (COG0224)PRK05621 (PRK05621) →
Rop-3-1	NZ_JH377359.1	+	2320813	2320858	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK07874 (PRK07874)AtpE (COG0636) → PRK05759 (PRK05759)AtpF (COG0711) → AtpH (COG0712)PRK13430 (PRK13430) → AtpA (COG0056)PRK09281 (PRK09281) → AtpG (COG0224)PRK05621 (PRK05621) →
Rop-3-2	NZ_CP003949.1	-	5793207	5793162	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Rim-1-1	NZ_AJJH01000159.1	+	23732	23777	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Rsp-4-1	NZ_AJLQ01000087.1	+	23811	23856	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK05815 (PRK05815)ATP-synt_A (pfam00119) → PRK07874 (PRK07874)AtpE (COG0636) → PRK05759 (PRK05759)AtpF (COG0711) → AtpH (COG0712)PRK13430 (PRK13430) → AtpA (COG0056)PRK09281 (PRK09281) → AtpG (COG0224)PRK05621 (PRK05621) →
Rsp-6-1	NZ_AKKP01000036.1	-	14697	14652	RNA → ← hypo
Rop-2-1	NZ_AJYC02000166.1	+	20908	20953	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Rwr-1-1	NZ_ANIU01000624.1	-	15537	15492	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Rwr-2-1	NZ_BAWF01000054.1	+	58602	58647	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
Rfa-21-1	NZ_JMEN01000002.1	-	18231	18186	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Rfa-1-2	NZ_LFDS01000014.1	+	60916	60961	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Rsp-15-1	NZ_KI519398.1	-	4412791	4412746	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →

Rsp-17-1	NZ_KQ031368.1	-	244975	244930	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-13-1	NZ_JMEU01000024.1	+	61028	61073	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-14-1	NZ_JMET01000032.1	-	18078	18033	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-6-1	NZ_JMFB01000009.1	-	41568	41523	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-18-1	NZ_JMEP01000006.1	-	18272	18227	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-15-1	NZ_JMES01000046.1	+	65370	65415	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-16-1	NZ_JMERO1000016.1	-	18453	18408	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-19-1	NZ_JMEO01000036.1	-	42912	42867	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-17-1	NZ_JMEQ01000003.1	-	18034	17989	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-9-1	NZ_JMEY01000018.1	+	61117	61162	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-4-1	NZ_JMFD01000009.1	-	18100	18055	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-7-1	NZ_JMFA01000028.1	-	18232	18187	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-20-1	NZ_JMEM01000014.1	-	503930	503885	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rfa-8-1	NZ_JMEZ01000016.1	+	635989	636034	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→	PrfA (COG0216)	prfA (PRK00591)	→
Rtr-1-1	NZ_AODO01000019.1	-	15129	15084	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→			
Rsp-19-1	NZ_CVQP01000001.1	+	953865	953910	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→			
Rsp-21-1	NZ_JMLO01000036.1	+	39540	39585	RNA→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→			
Sar-21-1	NZ_AZWI01000036.1	-	51029	50973	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-40-1	NZ_AZWX01000003.1	-	51034	50978	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-36-1	NZ_AZXA01000003.1	-	51182	51126	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-38-1	NZ_AZXG01000012.1	-	51140	51084	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-25-1	NZ_AZWV01000001.1	+	346941	346997	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-37-1	NZ_KI911342.1	-	51088	51032	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-39-1	NZ_KI911438.1	-	51088	51032	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-9-1	NZ_KB898403.1	-	50932	50876	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-4-1	NZ_KB896072.1	+	346814	346870	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Spa-11-1	NZ_KB892476.1	-	51107	51051	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-19-1	NZ_KB913036.1	-	2994862	2994806	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-12-1	NZ_KB896389.1	+	143497	143553	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-1-1	NZ_KB900168.1	+	1524	1580	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-27-1	NZ_JAEY01000041.1	-	51135	51079	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-3-1	NZ_KB896004.1	+	346986	347042	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-33-1	NZ_AUKM01000035.1	+	1712	1768	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-6-1	NC_009953.1	-	4579559	4579503	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-32-1	NZ_KE384262.1	+	143944	144000	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-30-1	NZ_KI519456.1	-	51241	51185	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-31-1	NZ_KI911435.1	-	51292	51236	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-16-1	NZ_KB896701.1	-	51106	51050	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-8-1	NZ_KB892533.1	+	146895	146951	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-14-1	NZ_KB905500.1	-	51099	51043	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-34-1	NZ_KB896161.1	+	146321	146377	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Spa-13-1	NZ_KB896968.1	+	1604	1660	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-18-1	NZ_KB905199.1	+	351246	351302	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-5-1	NZ_KB900324.1	-	51168	51112	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-7-1	NZ_KB895942.1	-	51129	51073	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-13-1	NZ_KB896467.1	+	146912	146968	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-15-1	NZ_KB896531.1	-	51113	51057	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-35-1	NZ_KI911491.1	-	51372	51316	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-28-1	NZ_AZWY01000001.1	+	356278	356334	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-26-1	NZ_KE384230.1	-	51394	51338	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-2-1	NZ_KB900232.1	-	51449	51393	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		
Sar-20-1	NZ_JNLS01000004.1	-	51467	51411	RNA→	hypo→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→		

Sar-22-1	NZ_KI911555.1	-	50976	50920	RNA→ hypo→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sar-17-1	NZ_KB896609.1	-	51038	50982	RNA→ hypo→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sar-24-1	NZ_KI911518.1	+	208754	208810	RNA→ hypo→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sar-23-1	NZ_KI911441.1	+	352956	353012	RNA→ hypo→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-474	2200071588	+	82438	82519	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-475	JGI12397J12024_1254667	+	31	93	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Whe-1-1	NZ_JXYP01000014.1	+	381001	381054	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ hypo→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ ECA_wecA (TIGR02380)GT_WecA_like (cd06853)→ ECA_wecA (TIGR02380)GT_WecA_like (cd06853)→
Spa-28-1	NZ_KI911408.1	-	162017	161962	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Spa-10-1	NZ_KB904923.1	+	18193	18248	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Spa-36-1	NZ_AZWR01000034.1	+	18288	18342	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Spa-8-1	NZ_KB895313.1	-	50515	50461	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Spa-9-1	NZ_KB896783.1	-	50546	50492	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Dau-1-1	NZ_JNYJ01000029.1	-	93182	93146	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Mlu-1-1	NZ_HF570108.1	-	6128873	6128807	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Mch-6-1	NZ_JOAN01000006.1	+	33922	33988	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Mpa-1-1	NZ_JNZS01000011.1	+	66563	66629	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Rsp-9-1	NZ_AJVB01000148.1	+	7131	7176	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PCRF (smart00937)RF-1 (pfam00472)PCRF (pfam03462)→
Rrh-2-1	NZ_AGVW02000073.1	+	58982	59027	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Rsp-14-1	NZ_JTIZ01000140.1	-	15896	15851	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Rpy-2-1	NC_023150.1	+	5211019	5211064	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Rsp-18-1	NZ_AFAQ01001953.1	+	74360	74405	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Rpy-1-1	NZ_AHBW01000042.1	+	40539	40584	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ PrfA (COG0216)prfA (PRK00591)→
Rsp-22-1	NZ_JPJJ01000011.1	-	17491	17446	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Rsp-5-1	NZ_CAVJ010000216.1	-	15449	15404	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Rae-1-1	NZ_CP011341.1	+	2197037	2197082	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Rrh-6-1	NZ_AZHI01000044.1	-	15673	15628	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Rru-2-1	NZ_ANGC01000054.1	+	15700	15745	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Rru-3-1	NZ_CCSD01000112.1	+	217226	217271	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Rru-3-2	NZ_LDUF01000007.1	-	15446	15401	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Rsp-7-1	NZ_AJFC01000306.1	+	45552	45597	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Rru-1-1	NZ_AOEX01000028.1	-	15828	15783	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ntr-1-1	NZ_BAGL01000019.1	+	91420	91465	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→
Not-2-1	NZ_BAGD01000040.1	+	28362	28407	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ HemK (COG2890)PRK09328 (PRK09328)→
Not-1-1	NZ_BATZ01000015.1	+	189934	189979	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ HemK (COG2890)PRK09328 (PRK09328)→
env-476	JGI20190J14840_1064086	+	179	244	RNA→
Msp-26-1	NZ_KQ058714.1	+	43212	43277	RNA→ hypo→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-477	JGI20205J14842_1097635	+	188	243	RNA→ hypo→
env-478	JGI12396J12026_1003816	+	12	59	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-479	JGI12271J12027_1041588	+	10	57	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-480	JGI12273J12029_10019447	+	10	57	RNA→ hypo→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Gsp-3-1	NZ_JOGR01000006.1	+	294303	294343	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462)→ HemK (COG2890)PRK09328 (PRK09328)→ hypo→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ LMWPc (smart00226)Wzb (COG0394)→ LMWPc (smart00226)LMWPAP (cd16344)→ hypo→
env-481	JGI24740J21852_10164145	+	98	134	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
env-482	botACOD_GAKN62C01CSCDR	+	372	436	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-483	topACOD_F95O9CU01EIYTS	+	236	305	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-484	JGI20263J16346_11281	-	78	28	RNA → hypo →
env-485	2210838270	-	125	37	RNA → hypo →
env-486	2034117903	-	276	240	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sam-2-1	NZ_JOEQ01000004.1	-	236796	236714	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sro-7-1	NZ_JOEP01000003.1	-	250250	250165	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) PRK09328 (PRK09328) →
Sro-3-1	NC_013595.1	+	1771338	1771423	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mau-1-1	NC_014391.1	-	5788708	5788645	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) →
Msp-9-1	NZ_KB895826.1	+	396351	396414	RNA → hypo → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) → hypo →
Msp-10-1	NC_014815.1	+	3318499	3318562	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) →
Msp-28-1	NZ_LEKG01000129.1	+	72	135	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) →
Mgl-1-1	NZ_JNZR01000015.1	-	22540	22477	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) →
env-487	JGI12698J15209_1012939	+	182	248	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-488	JGI12635J15846_10089936	+	506	573	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Msp-8-1	NZ_GG657738.1	-	2230600	2230534	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-489	JGI20206J14855_1044127	-	238	179	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-490	JGI20186J14852_1017385	+	370	429	RNA → ← hypo
env-491	JGI20204J15000_1053760	-	219	160	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-492	JGI20203J14952_1004251	-	245	186	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-493	JGI20204J15135_1053760	-	219	160	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Nco-1-1	NZ_KB903996.1	-	180981	180940	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-494	AP72_2010_repL_A100_1025205	-	373	326	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mca-1-1	NZ_JXSX01000002.1	+	873352	873417	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-495	JGI20241J16302_105831	+	273	334	RNA →
env-496	JGI12635J15846_10116580	+	1117	1162	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-497	JGI12269J14319_10020994	-	2767	2730	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-498	JGI12635J15846_13730630	-	99	50	RNA → hypo →
env-499	JGI12712J15308_10773049	+	159	209	RNA →
env-500	JGI12269J14319_10090585	-	241	190	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-501	JGI12269J14319_10493819	-	328	279	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-502	JGI20196J14858_1024988	-	290	239	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-503	JGI12712J15308_10023311	+	1278	1329	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-504	JGI12659J15293_10227025	+	221	272	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-505	JGI20188J14859_1052292	+	150	201	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-506	JGI20186J14852_1022270	-	272	221	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-507	JGI20203J14952_1005414	+	1323	1374	RNA →
env-508	JGI20205J14842_1005807	-	759	708	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-509	JGI20186J14852_1008003	-	59	8	RNA →
env-510	JGI20190J14840_1000844	+	1262	1313	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-511	JGI20204J15000_1002743	-	517	466	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-512	JGI20204J15135_1002743	-	517	466	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-513	JGI20183J14883_129429	-	281	230	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-514	JGI12635J15846_11642955	-	277	239	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-515	C688J13580_1150866	+	209	247	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Nca-2-1	NZ_BAFV01000016.1	+	24171	24216	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Nca-1-1	NZ_JNZF01000017.1	-	16307	16262	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Asu-1-1	NC_015564.1	-	3348646	3348602	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) →
env-516	JGI20245J16306_1034373	+	145	183	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-517	JGI12635J15846_10593975	+	102	140	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-518	JGI26342J46808_1010879	+	391	429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-519	JGI26337J50220_1100613	-	177	139	RNA → hypo →
env-520	JGI12698J15209_1088486	+	118	184	RNA →

env-521	JGI12659J15293_10241949	-	305	265	RNA → ←-hypo
env-522	JGI12630J15595_10661370	-	218	164	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-523	JGI12467J12023_1041632	+	41	119	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-524	JGI20276J16322_104776	-	170	120	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-525	JGI20275J16321_100019	-	565	515	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRf (pfam03462)ABC_tran_CTD (pfam16326) →
env-526	JGI20176J14865_113912	-	189	138	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-527	JGI12694J13545_1030456	+	50	104	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-528	JGI12649J13570_1002003	-	2744	2690	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
env-529	JGI12635J15846_10007700	-	7040	6986	HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
					RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
env-530	JGI12681J13546_1004659	-	463	409	HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
					RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-531	JGI12659J15293_10071495	+	208	262	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
env-532	JGI12659J15293_10081505	+	640	694	RNA →
env-533	JGI20235J16296_1010410	+	109	163	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-534	JGI12635J15846_10479974	+	427	511	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-535	JGI12648J13191_1102813	-	315	231	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-536	JGI12270J11330_10000477	+	1502	1555	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-537	JGI12269J14319_10000786	+	1502	1555	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-538	2044437860	+	359	441	RNA →
Sna-1-1	NC_013947.1	+	1383336	1383378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-539	JGI12269J14319_10084388	-	323	279	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-540	FIHLEPW02RU19J	-	259	208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-541	FIHLEPW02PK0H8	-	435	385	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-542	AP72_2010_repLA10_1090062	-	355	305	RNA → hypo →
env-543	FIHLEPW02TDTYE	-	192	142	RNA → hypo →
env-544	AF_2010_repIIA1_10229252	-	194	144	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-545	AF_2010_repIIA001_10407533	-	209	159	RNA → UMPK_like (cd02028) →
env-546	JGI12712J15308_10689240	+	44	86	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-547	JGI12659J15293_10376808	+	47	89	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-548	JGI12635J15846_12325035	+	141	177	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-549	JGI26341J46601_10034216	+	1087	1123	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-550	JGI26340J50214_10003356	+	235	271	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-551	JGI12630J15595_10226531	+	132	168	RNA → ←-hypo
env-552	JGI26346J50198_1083412	-	251	215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-553	JGI12419J13241_1069260	+	290	354	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-554	GBANfinal_FHNL2OP03RHL08	-	331	267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Tcu-1-1	NC_013510.1	-	4476819	4476755	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-555	JGI12681J13546_1026784	-	235	164	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-556	JGI12635J15846_10334590	-	676	605	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-557	JGI12270J11330_10077884	+	1435	1471	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-558	JGI12269J14319_10016588	+	541	577	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-559	JGI12269J14319_10048667	+	2404	2440	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-560	JGI26340J50214_10285047	+	212	248	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-561	JGI12631J13338_1101732	+	143	179	RNA → ←-hypo
env-562	JGI12635J15846_10088123	-	1905	1869	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-563	JGI12712J15308_10312427	-	172	136	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-564	JGI12635J15846_10115421	-	508	472	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-565	JGI26339J46600_10015394	-	475	439	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-566	JGI26341J46601_10189686	+	251	287	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-567	JGI26340J50214_10034757	-	1226	1190	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-568	JGI12270J11330_10005276	+	288	324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-569	JGI12269J14319_10440521	-	154	118	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-570	JGI26341J46601_10146534	+	327	363	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-571	JGI12635J15846_11977336	-	238	202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-572	JGI20272J16309_111800	-	126	88	RNA → ←-hypo
env-573	JGI20265J16348_10502	-	193	155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-574	JGI20271J16308_100694	+	240	278	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-575	JGI20279J16325_116846	+	78	116	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-576	JGI12712J15308_10051662	-	98	60	RNA → hypo →
env-577	2200192263	-	328	245	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-578	JGI20180J14839_1055467	-	123	69	RNA → rpmE (PRK00528)RpmE (COG0254)rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-579	JGI20249J16330_111215	+	99	153	RNA →
env-580	JGI20235J16296_1001053	+	90	144	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-581	JGI20245J16306_1002783	+	190	244	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-582	FWIREIOz_GKZ9IRQ02JVM2H	+	187	226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-583	FWIREIOz_GKZ9IRQ02I5BP1	-	345	305	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-584	JGI24740J21852_10250692	+	94	133	RNA → ←-hypo
env-585	JGI24735J21928_10300159	-	425	386	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-586	2044516099	+	244	282	RNA →
env-587	JGI12269J14319_10006866	+	697	782	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108)PRK07764 (PRK07764) →
env-588	JGI12269J14319_10074806	-	1301	1216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-589	AP72_2010_repL_A10_1033787	+	393	430	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-590	AP72_2010_repL_A100_1084424	+	92	129	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-591	FWIREIOz_GKZ9IRQ01DHWYY	+	73	112	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-592	2034052008	-	318	280	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-593	JGI12269J14319_10037047	+	1283	1334	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-594	AP72_2010_repL_A10_1129361	-	175	130	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-595	AP72_2010_repL_A100_1053081	+	201	246	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-596	AP72_2010_repL_A01_1302129	-	218	173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-597	AP72_2010_repL_A10_1217043	+	113	158	RNA → ←-hypo
env-598	JGI12631J13338_1003892	+	1735	1781	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-599	JGI12635J15846_10008878	-	6805	6759	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-600	JGI24738J21930_10757540	+	34	81	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nbr-4-1	NZ_BAFU01000023.1	+	104700	104745	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
Npa-1-1	NZ_BAGE01000019.1	+	16102	16147	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-601	JGI12272J11983_1372923	+	31	67	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-602	botACOD_GAKN62C01ECOXR	+	273	311	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gam-1-1	NZ_BAED01000048.1	+	130922	130967	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Gso-1-1	NZ_BANX01000039.1	-	25611	25566	RNA → ←-hypo
Gsh-1-1	NZ_AUHE01000013.1	-	16550	16499	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nsp-5-1	NZ_JAFQ01000004.1	+	3516432	3516476	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
env-603	JGI12273J12029_10017424	+	27	67	RNA → hypo →
Ari-2-1	NZ_AULB01000013.1	+	149713	149780	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-604	JGI12272J11983_1083811	+	14	53	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-605	JGI12467J12023_1087620	+	14	53	RNA → ←-hypo
env-606	JGI12397J12024_1060182	+	22	61	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-607	FNTS_GKKEVUV01BZ0X3	+	66	105	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-608	FWIREIOz_GKZ9IRQ02IPUM4	+	167	206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Ata-1-1	NZ_KI912598.1	+	15667	15704	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aha-1-1	NZ_AQUI01000002.1	+	1265681	1265725	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
env-609	C688J13580_1464814	-	190	152	RNA → ←hypo
env-610	SRS065099_LANL_scaffold_20477	-	54	11	RNA →
env-611	SRS015064_WUGC_scaffold_2261	-	310	267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-612	SRS018443_C3583993	-	193	150	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-613	SRS011126_C4505688	+	336	379	RNA →
env-614	SRS011126_C4505688	-	113	70	RNA → hypo → hypo →
env-615	SRS015063_C2095482	+	120	163	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-616	SRS015440_WUGC_scaffold_50169	+	447	490	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-617	SRS015470_WUGC_scaffold_6374	-	193	150	RNA → ←hypo
env-618	SRS015755_WUGC_scaffold_20709	-	47	4	RNA →
env-619	SRS015989_C2035914	-	193	150	RNA → ←hypo
env-620	SRS016331_C3936733	+	121	164	RNA → ←hypo
env-621	SRS016575_Baylor_scaffold_58847	-	199	156	RNA → ←hypo
env-622	SRS017139_Baylor_scaffold_68943	+	377	420	RNA → ←hypo
env-623	SRS017445_C2964102	+	117	160	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-624	SRS017691_C4999672	+	113	156	RNA → ←hypo
env-625	SRS021477_Baylor_scaffold_64383	-	113	70	RNA →
env-626	SRS022536_C4384832	-	199	156	RNA → ←hypo
env-627	SRS049268_C4081593	-	199	156	RNA → ←hypo
env-628	SRS058053_C5159809	-	193	150	RNA → ←hypo
Ama-1-1	NZ_JH711483.1	+	455479	455522	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-629	SRS011343_Baylor_scaffold_469	+	114	157	RNA → ←hypo
Pau-1-1	NZ_JNYD01000008.1	+	34980	35057	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → hypo → SUA5 (COG0009)TIGR00057 (TIGR00057) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
Psp-6-1	NZ_ADUJ01000804.1	+	15615	15653	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ses-1-1	NC_019673.1	-	8141257	8141203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) → DAP2 (COG1506)Bile_Hydr_Trans (pfam04775)BAAT_C (pfam08840) → Lpd (COG1249)PRK07818 (PRK07818) → HemK (COG2890)PRK09328 (PRK09328) →
Ksp-2-1	NZ_KK037166.1	+	7158781	7158815	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgl-1-1	NZ_CM001484.1	-	3488024	3487984	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-630	JGI24973J35851_1176941	-	248	206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aba-1-1	NZ_KB913037.1	-	3577594	3577551	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Ari-1-1	NZ_JMQ101000011.1	-	164510	164467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Ava-2-1	NZ_JNY01000004.1	-	220716	220673	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Ava-1-1	NZ_AYOU01000443.1	-	35768	35725	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Aal-2-1	NZ_JOEF01000005.1	+	165358	165404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-631	2200117070	+	1568	1604	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → prfA (PRK00591)RF-1 (pfam00472)PCRf (pfam03462) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) →
env-632	GBANfinal_FHNL2OP04ZB0BC	-	172	136	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-633	JGI24740J21852_10800136	+	174	210	RNA → hypo →
env-634	JGI24737J22298_10394236	-	256	220	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-635	JGI24735J21928_10110934	+	294	330	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PCRf (pfam03462)ABC_tran_CTD (pfam16326) →
env-636	JGI24738J21930_10339143	+	124	160	RNA → ←hypo
env-637	JGI24739J22299_10621000	+	75	111	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lae-1-1	NZ_JOFI01000046.1	-	29517	29476	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → DLH (COG0412)Bile_Hydr_Trans (pfam04775)BAAT_C (pfam08840) → Lpd (COG1249)PRK07818 (PRK07818) → HemK (COG2890)PRK09328 (PRK09328) →
env-638	SRS053917_LANL_scaffold_22599	+	286	333	RNA → ←hypo

env-639	SRS011255_Baylor_scaffold.25176	+	104	151	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-640	SRS013252_Baylor_scaffold.19505	+	1494	1541	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-641	SRS015215_C2366775	+	105	152	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-642	SRS015278_C1812809	+	411	458	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-643	SRS015278_C1812809	-	206	159	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-644	SRS022725_LANL_scaffold.111342	-	197	150	RNA→ ←-hypo
env-645	SRS051930_LANL_scaffold.6579	-	323	276	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-646	SRS075410_C2925444	+	106	153	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ama-2-1	NZ_AKFT01000226.1	-	10315	10268	RNA→ hypo→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Aen-1-1	NZ_KB894433.1	+	15128	15170	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Aha-3-1	NZ_KI632509.1	-	4883378	4883317	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-647	JGI24973J35851_1008812	+	1167	1208	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ prfA (PRK00591)PCRF (pfam03462)→
env-648	JGI24973J35851_1010391	-	1305	1264	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ prfA (PRK00591)RF-1 (pfam00472)PCRF (pfam03462)→
Ksp-1-1	NZ_CDME01000015.1	-	111616	111572	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→
Lal-2-1	NZ_JOEA01000021.1	+	93454	93495	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ DLH (COG0412)Bile_Hydr_Trans (pfam04775)BAAT_C (pfam08840)→ Lpd (COG1249)PRK07818 (PRK07818)→ HemK (COG2890)PRK09328 (PRK09328)→
Lae-1-2	NZ_JYJG01000134.1	+	673	714	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ DLH (COG0412)Bile_Hydr_Trans (pfam04775)BAAT_C (pfam08840)→ Lpd (COG1249)PRK07818 (PRK07818)→ HemK (COG2890)PRK09328 (PRK09328)→
env-649	FNTS067_GJ87FRN01CVTQK	-	106	72	RNA→
Psp-9-1	NZ_AEGE01000437.1	-	2109	2068	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ hypo→ hypo→
Aje-1-1	NZ_JNYZ01000004.1	-	127926	127889	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
[ir-1-1	NZ_KE387135.1	+	25080	25126	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ ECA_wecA (TIGR02380)GT_WecA_like (cd06853)→ hypo→
Ain-1-1	NZ_AXWW01000059.1	-	14834	14796	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→
Aja-1-1	NZ_CP008953.1	+	1210103	1210138	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Asp-6-1	NZ_JPLW01000003.1	+	572205	572240	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Aaz-1-1	NZ_ANMG01000003.1	-	63867	63832	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Aor-4-1	NZ_ASXH01000080.1	+	35738	35774	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Ssp-91-1	NZ_JOIQ01000021.1	+	124197	124233	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Abe-1-1	NZ_KB912942.1	+	23653	23690	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Aor-1-1	NZ_KN912592.1	+	508571	508607	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Aor-3-1	NZ_ASXG01000124.1	+	157002	157038	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Ade-1-1	NZ_AOHO01000019.1	-	158657	158622	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→
Ssp-5-1	NZ_GG657746.1	-	6816029	6815993	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ PrfA (COG0216)prfA (PRK00591)→
Aor-2-1	NZ_ASJB01000091.1	+	88996	89032	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ hypo→
env-650	JGI24737J22298_10153983	-	501	462	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ prfA (PRK00591)PCRF (pfam03462)→
env-651	JGI24738J21930_10140397	-	125	86	RNA→
env-652	JRH101000725.1	+	25745	25791	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→
Sha-1-1	NZ_KB912506.1	-	125509	125456	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ ECA_wecA (TIGR02380)GT_WecA_like (cd06853)→ hypo→
Spa-41-1	NZ_KI912213.1	-	219937	219883	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)→ ECA_wecA (TIGR02380)GT_WecA_like (cd06853)→ hypo→
Kal-2-1	NZ_CP007155.1	-	8601054	8601005	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kal-1-1	NZ_JNYH01000160.1	-	17281	17232	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Saz-1-1	NZ_CM001466.1	-	1832387	1832343	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

Saz-2-1	NZ_AHBX01000091.1	-	27128	27084	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Svi-1-1	NC_013159.1	-	3233924	3233883	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Svi-8-1	NZ_JRZE01000001.1	-	241211	241170	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-45-1	NZ_AZUM01000002.1	-	62099	62059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HTH_MerR-like_sg3 (cd01282)HTH_MERR (smart00422) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
Kar-1-1	NZ_JNYM01000248.1	+	820	862	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → STE14 (COG2020) →
Ani-1-1	NZ_ARVW01000001.1	+	5123288	5123325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Rrh-3-1	NZ_JOAA01000025.1	-	102373	102331	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
Scy-1-1	NZ_CM001440.1	-	4163623	4163579	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) →
env-653	JGI12271J12027_1317364	+	55	90	RNA → ←hypo
Ame-3-1	NC_014318.1	-	8567126	8567084	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Ame-2-1	NC_017186.1	-	8567182	8567140	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Ame-2-2	NC_018266.1	-	8577099	8577057	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Ame-1-1	NC_022116.1	-	8577043	8577001	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Ame-5-1	NZ_JMQJ01000008.1	+	22200	22242	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Ame-5-2	NZ_JMQG01000068.1	-	49889	49847	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) →
Ssp-46-1	NZ_JNXC01000009.1	+	134688	134733	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → DLH (COG0412)Bile_Hydr_Trans (pfam04775)BAAT_C (pfam08840) → Lpd (COG1249)PRK07818 (PRK07818) → HemK (COG2890)PRK09328 (PRK09328) →
Ami-2-1	NC_013093.1	-	7204512	7204468	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → PrfA (COG0216)prfA (PRK00591) →
Ssp-1-1	NZ_GL877878.1	+	167629	167675	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-654	JGI26535J51212_1001019	+	71	108	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-655	JGI26539J51216_1000587	-	26649	26612	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-656	JGI26531J51214_10001689	-	15226	15189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sts-1-1	NZ_AJSZ01000299.1	-	3790	3744	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-657	JGI12397J12024_1206537	+	4	58	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rsp-11-1	NZ_JYOP01000005.1	-	14897	14852	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-658	JGI11799J14266_104666	+	85	130	RNA → ←hypo
env-659	JGI1355J14265_100580	-	4687	4642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-660	JGI24972J35695_100056	-	16362	16317	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-661	JGI24971J35700_100060	+	57533	57578	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-662	JGI24975J35696_100061	+	57533	57578	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rer-4-1	NZ_ACNO01000014.1	+	120970	121015	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rqi-1-1	NZ_AODN01000001.1	+	127294	127339	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rsp-12-1	NZ_LEKE01000058.1	-	16710	16665	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rrh-5-1	NZ_ASJJ01000026.1	+	157576	157621	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rsp-10-1	NZ_CFW01000012.1	+	79898	79943	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rer-3-1	NC_012490.1	-	4297666	4297621	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GlyA (COG0112)glyA (PRK00011) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → Tim44 (COG4395) →
Rer-1-1	NC_022115.1	-	3994948	3994903	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rer-7-1	NZ_CM002793.1	-	3935713	3935668	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rer-6-1	NZ_CP011295.1	-	4024740	4024695	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rer-5-1	NZ_AGCF01000002.1	-	2284788	2284743	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rer-2-1	NZ_AUZK01000027.1	-	16252	16207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rsp-8-1	NZ_AVCO01000044.1	-	15061	15016	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rqi-2-1	NZ_JNCU01000020.1	+	109948	109993	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rop-4-1	NZ_JOIM01000019.1	-	16215	16170	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rrh-4-1	NZ_JNWS01000014.1	+	192760	192805	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Ace-1-1	NC_008578.1	+	694535	694574	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) PRK09328 (PRK09328) → SUA5 (COG0009) TIGR00057 (TIGR00057) → GT_WecA_like (cd06853) mraY (PRK00108) →
Gja-1-1	NZ_LDTZ01000026.1	-	28087	28042	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) PRK09328 (PRK09328) → SUA5 (COG0009) TIGR00057 (TIGR00057) → GT_WecA_like (cd06853) mraY (PRK00108) →
Gsp-2-1	NZ_BAFC01000059.1	-	28156	28111	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Got-1-1	NZ_BAFB01000227.1	-	28105	28060	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Gai-1-1	NZ_BANR01000032.1	-	28002	27957	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Asp-5-2	NZ_AYXG01000157.1	+	12560	12601	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) PRK09328 (PRK09328) →
env-663	_GX4IIKE01AVNLA	+	402	450	RNA →
Sma-1-1	NZ_CM001439.1	-	4262593	4262553	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) → PrfA (COG0216) prfA (PRK00591) →
env-664	JGI26531J51214_10053388	+	189	235	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-665	JGI26539J51216_1014970	+	457	503	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssu-1-1	NZ_KB905814.1	-	250505	250461	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssu-2-1	NZ_AJTQ01000139.1	-	131331	131287	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sje-1-1	NZ_JOEH01000016.1	-	36292	36248	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sal-2-1	NZ_BBPL01000004.1	-	265730	265686	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sal-3-1	NZ_JQML01000001.1	-	3284063	3284019	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sru-1-1	NZ_JQMJ01000004.1	-	6329451	6329407	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-100-1	NZ_JOHT01000012.1	-	106860	106816	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-129-1	NZ_JOGD01000005.1	-	35544	35500	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-171-1	NZ_AUEV01000006.1	+	1894	1939	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-170-1	NZ_KE384281.1	-	396059	396015	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-56-1	NZ_AUKO01000001.1	-	376807	376763	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kaz-1-1	NZ_JQMO01000003.1	+	1403666	1403710	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Svi-7-1	NZ_KB904663.1	+	33286	33330	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Smo-1-1	NZ_AORZ01000143.1	-	15463	15418	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ama-4-1	NZ_HE978637.1	+	431034	431078	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) PRK09328 (PRK09328) → YgaA (COG1238) SNARE_assoc (pfam09335) → SUA5 (COG0009) TIGR00057 (TIGR00057) → ECA_wecA (TIGR02380) GT_WecA_like (cd06853) → hypo → hypo → PRK05815 (PRK05815) ATP_synt_A (pfam00119) → PRK07874 (PRK07874) AtpE (COG0636) → PRK05759 (PRK05759) AtpF (COG0711) → AtpH (COG0712) PRK13430 (PRK13430) → AtpA (COG0056) PRK09281 (PRK09281) → PRK05621 (PRK05621) ATP_synt (pfam00231) →
env-666	JGI24770J26754_10081147	+	845	890	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Bsc-2-1	NZ_AP012331.1	+	769739	769783	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Bsc-1-2	NZ_JGZO01000023.1	-	265290	265246	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssc-1-1	NC_013929.1	-	3291560	3291514	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssc-3-2	NZ_KL997517.1	+	318375	318421	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sle-1-1	NZ_LN831790.1	-	2823297	2823251	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Scl-1-1	NZ_CM001015.1	+	4930378	4930424	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Scl-1-2	NZ_CM0000913.1	+	4939868	4939914	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sre-3-1	NZ_KL575619.1	-	35887	35841	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ser-2-1	NC_009142.1	-	7044070	7044025	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) PRK09328 (PRK09328) →
Ser-1-1	NZ_AVCN01000136.1	+	15183	15228	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) PRK09328 (PRK09328) →
Ssp-20-1	NZ_KE150472.1	+	563628	563673	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-116-1	NZ_JOHQ01000026.1	+	21477	21522	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-111-1	NZ_JOGK01000004.1	+	39032	39077	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sgr-5-1	NZ_JNWT01000006.1	+	36815	36860	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sal-8-3	NZ_JODZ01000009.1	+	43556	43601	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sal-8-4	NZ_JODR01000008.1	+	36815	36860	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sst-1-1	NZ_KQ257875.1	+	1320008	1320054	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Mne-3-1	NC_023036.2	-	4254218	4254162	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →
Msp-24-1	NZ_AOHQ01000138.1	-	14981	14925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057) → GT_WecA_like (cd06853)mraY (PRK00108) →

9.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 9.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one L31-

cd01128 (1) Transcription termination factor rho is a bacterial ATP-dependent RNA/DNA helicase.

cd01282 (1) Helix-Turn-Helix DNA binding domain of putative transcription regulators from the MerR superfamily.

cd02028 (1) Uridine monophosphate kinase-like (UMPkin-like) is a family of proteins highly similar to the uridine monophosphate kinase (UMPK, EC 2).

cd04601 (1) This cd contains two tandem repeats of the cystathionine beta-synthase (CBS pair) domains in the inosine 5' monophosphate dehydrogenase (IMPDH) protein.

cd06199 (1) Cytochrome p450-like alpha subunits of E.

cd06853 (363) This subfamily contains Escherichia coli WecA, Bacillus subtilis TagO and related proteins.

cd16344 (1) low molecular weight protein arginine phosphatase.

COG0009 (410) tRNA A37 threonylcarbamoyladenine synthetase subunit TsaC/SUA5/YrdC [Translation, ribosomal structure and biogenesis]

COG0055 (7) FoF1-type ATP synthase, beta subunit [Energy production and conversion]

COG0056 (13) FoF1-type ATP synthase, alpha subunit [Energy production and conversion]

COG0119 (18) Glycine/serine hydroxymethyltransferase [Amino acid transport and metabolism]

COG0216 (536) Protein chain release factor A [Translation, ribosomal structure and biogenesis]

COG0224 (3) FoF1-type ATP synthase, gamma subunit [Energy production and conversion]

COG0254 (1) Ribosomal protein L31 [Translation, ribosomal structure and biogenesis]

COG0394 (28) Protein-tyrosine-phosphatase [Signal transduction mechanisms]

COG0412 (4) Dienelactone hydrolase [Secondary metabolites biosynthesis, transport and catabolism]

COG0472 (2) UDP-N-acetylmuramyl pentapeptide phosphotransferase/UDP-N-acetylglucosamine-1-phosphate transferase [Cell wall/membrane/envelope biogenesis]

COG0596 (1) Pimeloyl-ACP methyl ester carboxylesterase [Coenzyme transport and metabolism, General function prediction only]

COG0636 (14) FoF1-type ATP synthase, membrane subunit c/Archaeal/vacuolar-type H⁺-ATPase, subunit K [Energy production and conversion]

COG0711 (14) FoF1-type ATP synthase, membrane subunit b or b' [Energy production and conversion]

COG0712 (8) FoF1-type ATP synthase, delta subunit [Energy production and conversion]

COG1118 (3) L-asparagine transporter and related permeases [Amino acid transport and

metabolism]

COG1186 (1) Protein chain release factor B [Translation, ribosomal structure and biogenesis]

COG1238 (1) Uncharacterized membrane protein YqaA, SNARE-associated domain [Function unknown]

COG1249 (5) Pyruvate/2-oxoglutarate dehydrogenase complex, dihydrolipoamide dehydrogenase (E3) component or related enzyme [Energy production and conversion]

COG1409 (1) 3',5'-cyclic AMP phosphodiesterase CpdA [Signal transduction mechanisms]

COG1472 (2) Periplasmic beta-glucosidase and related glycosidases [Carbohydrate transport and metabolism]

COG1506 (1) Dipeptidyl aminopeptidase/acylaminoacyl peptidase [Amino acid transport and metabolism]

COG1598 (1) Predicted nuclease of the RNase H fold, HicB family [Defense mechanisms]

COG2020 (1) Protein-S-isoprenylcysteine O-methyltransferase Ste14 [Posttranslational modification, protein turnover, chaperones]

COG2197 (2) DNA-binding response regulator, NarL/FixJ family, contains REC and HTH domains [Signal transduction mechanisms, Transcription]

COG2890 (456) Methylase of polypeptide chain release factors [Translation, ribosomal structure and biogenesis]

COG4395 (1) Predicted lipid-binding transport protein, Tim44 family [Lipid transport and metabolism]

COG4586 (8) FoF1-type ATP synthase assembly protein I [Energy production and conversion]

pfam00119 (18) ATP synthase A chain.

pfam00213 (6) ATP synthase delta (OSCP) subunit.

pfam00231 (10) ATP synthase.

pfam00472 (24) RF-1 domain.

pfam00478 (2) IMP dehydrogenase / GMP reductase domain.

pfam00571 (2) CBS domain.

pfam01197 (1795) Ribosomal protein L31.

pfam02874 (1) ATP synthase alpha/beta family, beta-barrel domain.

pfam03462 (49) PCRFB domain.

pfam03816 (4) Cell envelope-related transcriptional attenuator domain.

pfam04775 (5) Acyl-CoA thioester hydrolase/BAAT N-terminal region.

pfam05534 (1) HicB family.

- pfam07690 (1) Major Facilitator Superfamily.
 pfam08840 (5) BAAT / Acyl-CoA thioester hydrolase C terminal.
 pfam09335 (1) SNARE associated Golgi protein.
 pfam09527 (5) Putative F0F1-ATPase subunit Ca²⁺/Mg²⁺ transporter.
 pfam09851 (7) Short C-terminal domain.
 pfam13520 (3) Amino acid permease.
 pfam13649 (2) Methyltransferase domain.
 pfam14330 (1) Domain of unknown function (DUF4387).
 pfam16326 (5) ABC transporter C-terminal domain.
 PHA03169 (1) hypothetical protein; Provisional
 PRK00001 (18) serine hydroxymethyltransferase; Reviewed
 PRK00019 (1795) 50S ribosomal protein L31; Reviewed
 PRK00108 (68) phospho-N-acetylmuramoyl-pentapeptide-transferase; Provisional
 PRK00528 (3) 50S ribosomal protein L31; Reviewed
 PRK00591 (571) peptide chain release factor 1; Validated
 PRK01678 (4) 50S ribosomal protein L31 type B; Reviewed
 PRK05567 (1) inosine 5'-monophosphate dehydrogenase; Reviewed
 PRK05621 (13) F0F1 ATP synthase subunit gamma; Validated
 PRK05759 (14) F0F1 ATP synthase subunit B; Validated
 PRK05815 (18) F0F1 ATP synthase subunit A; Validated
 PRK06214 (1) sulfite reductase; Provisional
 PRK06876 (4) F0F1 ATP synthase subunit C; Validated
 PRK07764 (1) DNA polymerase III subunits gamma and tau; Validated
 PRK07818 (5) dihydrolipoamide dehydrogenase; Reviewed
 PRK07874 (10) F0F1 ATP synthase subunit C; Validated
 PRK08279 (1) long-chain-acyl-CoA synthetase; Validated
 PRK09280 (7) F0F1 ATP synthase subunit beta; Validated
 PRK09281 (14) F0F1 ATP synthase subunit alpha; Validated
 PRK09328 (452) N5-glutamine S-adenosyl-L-methionine-dependent methyltransferase; Provisional
 PRK09376 (1) transcription termination factor Rho; Provisional
 PRK10959 (1) outer membrane protein W; Provisional
 PRK11391 (26) phosphotyrosine-protein phosphatase; Provisional
 PRK13430 (14) F0F1 ATP synthase subunit delta; Provisional
 PRK15098 (2) beta-D-glucoside glucohydrolase; Provisional
 PRK15119 (4) undecaprenyl-phosphate alpha-N-acetylglucosaminyl 1-phosphate transferase; Provisional
 smart00116 (2) Domain in cystathionine beta-synthase and other proteins.
 smart00226 (3) Low molecular weight phosphatase family.
 smart00421 (2) helix_turn_helix, Lux Regulon.
 smart00422 (1) helix_turn_helix, mercury resistance.
 smart00937 (12) This domain is found in peptide chain release factors.
 TIGR00057 (410) tRNA threonylcarbamoyl adenosine modification protein, Sua5/YciO/YrdC/YwlC family. [Protein synthesis, tRNA and rRNA base modification]
 TIGR00350 (4) cell envelope-related function transcriptional attenuator common domain. [Regulatory functions, Other]
 TIGR00711 (1) drug resistance transporter, EmrB/QacA subfamily. [Cellular processes, Toxin production and resistance, Transport and binding proteins, Other]
 TIGR02380 (291) undecaprenyl-phosphate alpha-N-acetylglucosaminyl 1-phosphatetransferase. [Cell envelope, Biosynthesis and degradation of surface polysaccharides and lipopolysaccharides]
 TIGR03025 (1) exopolysaccharide biosynthesis polyprenyl glycosylphosphotransferase.
 TIGR03534 (2) protein-(glutamine-N5) methyltransferase, release factor-specific. [LIV]PRx[DE]TE (in Escherichia coli, IPRPDTE) confers specificity for the release factors rather than for ribosomal protein L3. [Protein fate, Protein modification and repair]
 TIGR03695 (1) 2-succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylate synthase. [Biosynthesis of cofactors, prosthetic groups, and carriers, Menaquinone and ubiquinone]
 TIGR04211 (1) SH3 domain protein.
 TIGR04360 (3) conjugative transfer region protein TrbK. [Mobile and extrachromosomal element functions, Plasmid functions]

9.4 Multiple-sequence alignment

Each L31-Actinobacteria RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 9.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The L31-Actinobacteria RNA itself is denoted by the line underneath marked 5' and 3' on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded green. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-Crick or G-U

pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, red nucleotides: nucleotide identity conserved more than 97% of the time, black nucleotides: 90%, gray nucleotides: 75%, red circle (◉): nucleotide is present 97% of the time, black circle (◐): 90%, gray circle (◑): 75%, white circle (◒): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Aac-1-1, Acy-2-1, Ade-2-1, Age-1-1, Ama-1-1, Ama-2-1, Ame-1-1, Ame-2-1, Ame-2-2, Ame-4-1, Ame-5-1, Ame-5-2, Ane-1-1, Ava-1-1, Bas-2-1, Bas-3-1, Bbo-1-1, Bbo-2-2, Bco-2-1, Blo-1-1, Blo-10-1, Blo-11-1, Blo-12-1, Blo-13-1, Blo-14-1, Blo-15-1, Blo-16-1, Blo-17-1, Blo-18-1, Blo-2-1, Blo-20-1, Blo-21-1, Blo-22-2, Blo-22-3, Blo-22-4, Blo-22-5, Blo-22-6, Blo-22-7, Blo-22-8, Blo-22-9, Blo-23-1, Blo-24-1, Blo-25-1, Blo-25-2, Blo-26-1, Blo-27-1, Blo-28-1, Blo-29-1, Blo-3-1, Blo-30-1, Blo-31-1, Blo-32-1, Blo-33-1, Blo-35-1, Blo-4-1, Blo-5-1, Blo-6-1, Blo-7-1, Blo-8-1, Blo-9-1, Bme-2-1, Bre-1-2, Bsc-1-2, Bsp-1-1, Bsu-1-1, Bsu-2-2, Bth-1-1, Bth-4-1, Bth-5-2, Bts-2-1, Bts-2-2, Fsp-10-1, Fsp-11-1, Fsp-12-1, Fsp-15-1, Fsp-4-1, Gal-2-1, Gal-3-1, Ghi-1-1, Gpo-1-1, Gpo-2-1, Gte-1-1, Gte-2-1, Gte-5-1, Kal-1-1, Kau-1-1, Mab-1-1, Mab-1-10, Mab-1-100, Mab-1-101, Mab-1-102, Mab-1-103, Mab-1-104, Mab-1-105, Mab-1-106, Mab-1-107, Mab-1-108, Mab-1-109, Mab-1-11, Mab-1-110, Mab-1-111, Mab-1-112, Mab-1-113, Mab-1-115, Mab-1-116, Mab-1-117, Mab-1-118, Mab-1-119, Mab-1-12, Mab-1-120, Mab-1-121, Mab-1-122, Mab-1-123, Mab-1-124, Mab-1-125, Mab-1-126, Mab-1-127, Mab-1-128, Mab-1-129, Mab-1-13, Mab-1-130, Mab-1-131, Mab-1-132, Mab-1-133, Mab-1-134, Mab-1-135, Mab-1-136, Mab-1-137, Mab-1-138, Mab-1-139, Mab-1-14, Mab-1-140, Mab-1-141, Mab-1-142, Mab-1-143, Mab-1-144, Mab-1-145, Mab-1-146, Mab-1-147, Mab-1-148, Mab-1-149, Mab-1-15, Mab-1-150, Mab-1-151, Mab-1-152, Mab-1-153, Mab-1-154, Mab-1-155, Mab-1-156, Mab-1-157, Mab-1-158, Mab-1-159, Mab-1-16, Mab-1-160, Mab-1-161, Mab-1-162, Mab-1-163, Mab-1-164, Mab-1-165, Mab-1-166, Mab-1-17, Mab-1-18, Mab-1-19, Mab-1-2, Mab-1-20, Mab-1-21, Mab-1-22, Mab-1-23, Mab-1-24, Mab-1-25, Mab-1-26, Mab-1-27, Mab-1-28, Mab-1-29, Mab-1-3, Mab-1-30, Mab-1-31, Mab-1-32, Mab-1-33, Mab-1-34, Mab-1-35, Mab-1-36, Mab-1-37, 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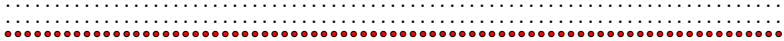
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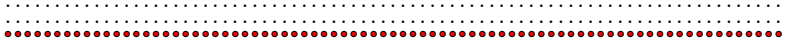
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env-3CGUCAGGUCACGUCAGGUCAGGUCAGGUCACGUCUGGUCAGGUCGCGGUCUGGAGACUCGAGCGU
env-4 GAUGGGCGCCGAGGACUGAGCGUCCGACGAGGGAACAUCCGGAUUCGCGCGCGGUCGAGCAGGUGGCAACAUCGCC
Cac-1-1 GGUCGCGGUGCGCGCGCGCGCGCACCCUGGACGGGCGUGGAAUAACCAACCCCGCGCGCGGCUAAGAUUGGUUC
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env-10GCUCUGGACACUCGUGCCACGA
env-11UCGCCUCGGAACGGUAGCGCGGGCGCGGAGGGUCGGAACGGUUUGUUCGCGCGGCGUAGUCGGGCAAAUAGUCC
env-13 AGGCCGAGCCGCUUUGAGUCGUGGGAUACCCCGCUGCCGCGUAGCUCCAGCAACGGGCGAGACUGGGGUGACUGGC
env-14 CGUUGGUCGUGUCGGCCAGUUCACUGCGCGGGGGCGUACCGCAUUGGACCGGGGGCGCGGGGUGGCAAAUUGCCA
Apo-1-1 CAUCGGGAUUCUUCGUCUAGCAGCGCCCGGAGCCGCGGAGGAAUUGCGCGGACCCCGCUUUCGUACCAUUGCCA
env-15 CCGAGCGGUGUCGACAGGUCACUGCGCCAGGGCGAAGUCGCAUUGGACCGGGGGCGCGGAGGUGGCAAAUUGCCA
env-16GC
env-17GACUGUC
env-18 CCUGAUCGGAACCGCGCGGGCGGGAAACCCCGGUCGGAUUUGUUGACCCCGUCGACACUGGCAACCAUACUC
Ama-3-1 GGUGGCGCCCCACCGCGAGGUCGCGCACACCGGGCGGAAUUGGUGUCCCGAGGGUGUUGACUCUCUUGUUUG
Nin-1-1 GCGUGCGCGUUUAGGCUACUGGGCGGACUCUGGCAUAUUCGCAACAGGCAUCGCGCCACAGGGCGGAAACGUCANGAC
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Asu-2-1 UUCAAGGGGUGGAAUUGCGUGGGGGGUGGUGGUAAGUGCGUUCGCGGCGUCUGGCAAAUAGCCCGCUGACG
Psp-8-1 GGGCGUUUAGGCGAUCGCGGUGUACUCUGGCAUAAGGCGUGUCAUGUCGCGGCUACGGCGGGUGGACCGCGCAC
env-22CAC
env-24AUGGAAUGCGGGCGCAUCUCGCGUUGCAUGUCUGGACACUGGCAACAGG
env-25 CGCCGUCGAGGCGUCAGGAUAUCUUUCGCGCCACCCCGUUUGGGAGAUUGCGCCAGUCUCCGCGACUCUGGUAC
Sfi-5-1 GCGCACAGCAGCAGCGGGGAAACGCGGCGCCACGUGGCGUUUGGUCGCGGGCGCCGACUCUGGAAUAUCUGAUUCU
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env-26 CGGCUUCUGCGGACCCCGGGAAUAGAUCCCCCGCCCCCGUUUUGGGGUAUGCGCCAGUCUCCGCGACUCUGGUAC
env-27AUUACCGCAGCGUUCGACAGGUGGCAAAUUCGCCC
env-28 GCGUCCUAGUGGGGUCACCGGCGUGAUGGACGCGGUCGGGACGGUUUGGUAUCUGGCGAGUAGGCAAAUUGGUGG
Cbo-1-1 GCGCGCCGGGAGCAGGAGGACUGAUCGCGGACGGUCGCGGUAUUGCGCGGACCGACCGUCUGGCAACUCUGUCC
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env-30 CUGUUAACCCCGUAAGCGGUCGAGGCGCAUUAUUCGGGACUUCGUGCCCGGUGGCAUACUGGUAUCGUGCAUCCAG
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env-33GCCGUCUCUGGACACUGUUA
env-34 GUCUCCUACCGUGCGGAAUGCGGACCGGUGCGGCGGCUUUUUGAUGCGGCAUUAUCGUCACACACUGGACCCUC
Car-1-1 UCGGCUUGCGGGUCGCGGACGUCGUGCAGUCAGCGCGGAAUUGGCAACCGCGGCGUUGUUCUGCAUAUUGAGU
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env-38 GUGGACAGGACUCGUAUCGAGCGGUGGAGCGGAAUUGCCCGGAUUAUCGCGCGUUGGAGCAGGUGGCAACAUCGCC
env-39 GGUGCGCGCGGUCAGCCGAUCGCGCAACCGUCGCAAGCGCGUUGUUCGUGGGUCGCGCGGUCUGGCAACAUCGUGA
env-40CACCCACCGGUCGCGGAGGACCCCGGAUGGGCGUGGAGCACCGCCCGUGGCAACUCGGAACG
env-41UGCUCUGGACACUCGAGCG
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Sya-1-1 GAAUAGACCGGACCCUUCGCGUUAAGCAGGCGUCUCAGAAUUUUGACAGGCGGCCCGGUCUGGCAACUCGUGUCU
Ssp-87-1 GAAUAGUCCGACCCUUCGCGUUAAGGAGAGUUCUCAGAAUUUUGACAGGCAAGCCCGUCCUGGCAACUCGUGUCU
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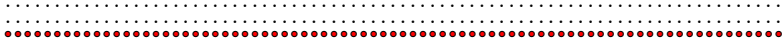
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 Mau-2-1 GGGCGUUUAGGCUACUGGGGUUAGACCGGCAUUAUAGCGAUGUCAGUCUCCGGCCUCCGGCGGGGAGCCGCCAACAC
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 env-153CU
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 env-158 GGGCGCCGGAAUACGGGGUCCUACCGCGUUUACCCUCCGUAAGCCGGUCUGUCACACUAGGGCCGGUCAUA
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env-290 UGGCCAGGAGCGCUAGCCCGGGAAUUGCGGACGGUCAGAUUGGUGAGGGGUCUGGCACACUAGAACCGGCUAUA
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Asp-1-1 UUUAUCGACCAAGGACCGGUCGCGCGUUGGAAUUUCUUGGGGCAAGGACGUGGCAGACUGGUUACUUGGCGGAGUC
env-300GGGAAUUGGCAACCGCUCUGGCAGACUGGUG
env-301GGAUUGGCAACCGCUCUGGCAGACUGGUG
env-302CGU
env-303GU
Nsp-6-1 GAUUUUAGGGGUAUAGCGGUUCUGGCAUACUGAACGUCGUGGCGUCUCUGCGCCGAGCAGACUUCGCGCUA
env-304ACCCUGGCAGCGUUUAGGACGUCGCGGUUAGCUGGCAGAAUUGGACCGCGGAC
env-306 CAGGCGCGGAGGAAUAGCUGACCCUGGCAGCGUUUAGGACGUCGCGGUUAGCUGGCAGAAUUGGACCGCGGAC
env-307 CAGGCGCGGAGGAAUAGCUGACCCUGGCAGCGUUUAGGACGUCGCGGUUAGCUGGCAGAAUUGGACCGCGGAC
env-308GGAUACCCACCCUUGGCAAGCGUUUAGGUCGUGGCGUAGCUGGCAGAAUUGGACCGCGGACCC
env-309 UGGUACAGGAGGAAUACCCACACUCUGGCACGCGUUUAGGUCGUGGCGGUUAGCUGGCAGAAUUGGACCGCGGACCC
env-310 GAAGACGUAUGCGGAGCGGACGACCGCCCGUCCAGCGCGGAAUUGCUUACCGGCAUCGCGCUAACCUAGCA
env-311 CGGAUUGCCCGGAAUAGCCGUCGCGCGGCGUUUAGGCUACUAGCGGUUAGCUGGCAGAAUUGGCGCGGAGC
env-312GUUAGGGGCAUAGCGGUCAGCUGGCAGAAUUAACAGCCGAAU
env-314UUAGCGGCAACCCCGCGGGGAUUUCGUGGUCGAGGACGUGGUCGCGUUGGCAGACUAGUACUCGCAUA
Ami-1-1 GUUAACCGGGGAAUUCGUGGCGUCUUGGUAUUUCGUGGUAAGCGGAGGCAUGGCAGACUGGUAUCGCGGCAU
env-315ACUGACCC
env-317CAGACUGACCC



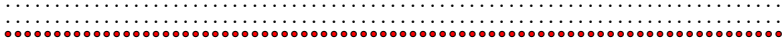
env-379 CUCGCGCGGGCCGUCAGCCGGAAUCAUCGGAGGCCACGAAUGUUGGAGGGUCUGGCACACUAGGAAGCCGGACCA
env-380 CCGGGUGCCCGCAGCUUACAGCAUCUUGGCACACUUGGAGCCUACGAGA
Sgr-9-1 GGGGUCGUGAGGUAGCCGGGAAUAUCUUCGCGCCGACCCCGUUUGGGAGAUUGCGCCAGUCCUGGCAGACUGGUAC
Sex-2-1 UAGCCCCCGGACAGCCGGGAAUAUCUUCGCGCCGACCCCGUUUGGGAGAUUGCGCCGUCUUGGCAGACUGGUAC
Ssp-115-1 GCCCCUUGCGGACCCCGGAAUAUCGCGCCGCUCCACCCCGUUUGGGAGAUUGCGCCGUCUUGGCAGACUGGUAC
Ssp-105-1 ACCCCGCGGGGCGGGGAAUAUCGCGCCGUCACCCCGUUUGGGAGAUUGCGCCGUCUUGGCAGACUGGUAC
Mgl-2-1 CUGACCCCGCGGGCCCGGAAUAUCGCGCCGCUCCACCCCGUUUGGGAGAUUGCGCCGUCUUGGCAGACUGGUAC
Sgr-12-2 UAGUCCCGGGACACCGGAAUAGGACCGCCACCCCGUUUGGGAGAUUGCGCCGUCUUGGCAGACUGGUAC
Fsp-14-1 CAGCCGGUUAACAGGCGUGCGCGGUCGUGGCGCGCCGUCGCGCAAGUCCGCGGAAUUGGGAGAUUGGGGUGUA
Fsa-1-1 GGAUAUAGGCGCGGUCGCGGUCGUAACGGCAUCUGGCACCGUACCCAGUCACAGGUCUGGCAGAUUGGGCCGUA
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Spa-31-1 CGAGUUUACCGUCCAGUCGUGGCGAGCCCGCGUCGCAAGCCGACGUGACCCCGUGGCAGACUGGUUCGUGGCC
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Spa-25-1 CGAGUUUACCGUCCGUGCGCGCGCGCCCGCGUCGCGAGCCAAACUCCCGCGUGGCAGACUGGUUCGUGGCC
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Msp-3-1 CAGCGCGAGGAUAUGUACCGCGCGCGAGGCGUUUAGGACCUUGGGCGUCAGUCCGCAUUAUCGACCGCAACCCC
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Nsp-7-1 GGUGCGUUGGAGUGCGUAUCGGCGGUUCUGGCAUAUCGACCGUCGUGCGUCUGGAUCGCGAGACCAUCCCGCUA
Nve-1-1 GGUUGCGUUGGCGUGCAUCGCGGCUUUGGCAUAUCGACCGUCGUGCGUCUGGAUCGCGAGACCAUCCCGCUA
Nao-1-1 GGUGCGUUGGAGUGCGUAUCGGCGGUUCUGGCAUAUCGACCGUCGUGCGUCUGGAUCGCGAGACCAUCCCGCUA
Nce-1-1 GGUGCGUUGGAGUGCGUAUCGGCGGUUCUGGCAUAUCGACCGUCGUGCGUCUGGAUCGCGAGACCAUCCCGCUA
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env-382 CCGGUCGCGCACCCGUGGCAUUCGGCGUGGCGCAAGGGGUCGUAUUUCCCGGGUUGCGUAGACUUA
env-384 UCCACAGCCACCCGUGGUAUUGAUAUCGGCGUGGCGCAAGGGGUCGUAUUUCCCGGGUUGCGUAGACUUA
env-386 CGUAUUUCCCGGGUUGCGUAGACUUA
env-390 GCNCGUCGCCACACCGGUUNUGCAUUCGGCGUGGCGCAAGGGGUCGUAUUUCCCGGGUUGCGUAGACUUA
Bas-1-1 CUCGCGUCCACACCGUUGGGUUAUCGGCGUGGCGCAAGGGGUCGUAUUUCCCGGGUUGCGUAGACUUA
Bas-2-2 GUCGACCGGCCUCCGUGUAUUGAUAUCGGCGUGGCGCAAGGGGUCGUAUUUCCCGGGUUGCGUAGACUUA
Bsp-3-1 GCGGUCGCCACACCGGUGGCAUUCGGCGUGGCGCAAGGGGUCGUAUUUCCCGGGUUGCGUAGACUUA
env-391 CCGACAGCCACUCCGUGUAGGAUUCGGCGUGGCGCAAGGGGUCGUAUUUCCCGGGUUGCGUAGACUUA
env-394 CGACUGGUCUCCGGUUGGUAUUCGGCGUGGCGCAAGGGGUCGUAUUUCCCGGGUUGCGUAGACUUA
env-396 UCCACAGCCACUCCGUGUAGGAUUCGGCGUGGCGCAAGGGGUCGUAUUUCCCGGGUUGCGUAGACUUA
Bsp-2-1 UCCGUCGCCACACCGGUGGCGAUAUCGGCGUGGCGCAAGGGGUCGUAUUUCCCGGGUUGCGUAGACUUA
Bas-2-3 CGACUGGUCUCCGGUUGGUAUUCGGCGUGGCGCAAGGGGUCGUAUUUCCCGGGUUGCGUAGACUUA
Mma-2-1 UGGCGGGCAGGGAAUACCGCCCGUACACGCGUUUAGGAGUCGCGGUGUACUUGCAUUAUGGACCGCGACC
Msp-2-1 ACCGAGGCGAGAAUACCGCGGGUGGCGCACGUAUAGGGCGUGGCGGCAACUUGCAUUAUGGACCGCGACC
env-398 CUUAGUUGGCAACAUGCCUA
Nji-1-1 AACCGAGCCCGGUGGACCCGCGCCGAAACAAAACCGGGGGAUCGGCGUUUACACGUAUUCGUAACAACAUGCCUA
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Mse-3-2 GGAACCGGCGGGGAAUAGGCGCGGUAUCGCGCGUUUAGGAGUUGGCGGUAUCUUGCAUUAUGGACCGCGACC
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env-400 CCGGCAACCGGAAUAGUCCGCUAAGCACGCGUUUUCGCAACUGGCGGUAUCUUGCAUUAUGGACCGCGACC
Msp-21-1 GCGCGUGGCGGGAAUAGUUGCGUGUACGCGUUUUCGCAACUGGCGGUAUCUUGCAUUAUGGACCGCGACC
Sal-7-1 GGCCCGUGCAGCGGCGGGGAAUAACGGGGGCCACCCCGUUUUGGAGAUUGCGGACAGUCCUGGCAGACUGACC
Szi-1-1 GUGCCCGGUCGCGCGGGGAAUAGAUACCUACCCCGGCUUUGGAGAUUGCGGUCAGUCCUGGCAGACUGGUAC
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Ssp-13-1 UCGGUCGGGGGUCGUGGAAUAACCCAGGGGUAACCCCGUUUUGGAGAUUGCGGUCGCGGAGACUGGACU
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Sal-4-1 UACCCAGGGGUAACCCCGUUUUAACCCAGGGGUAACCCCGUUUUGGAGAUUGCGGUCGCGGAGACUGGACU
Ssp-123-1 GAAGCCCGCGGGCGGAAUAAGUAGCGGGCCACCCCGUUUUGGAGAUUGCGGUCGCGGAGACUGGACU
Sgr-2-1 AAUUCACUUCGCGACCGGGAAACAAACGAGCGGCGCCCGUUUUGGAGAAAGCGGACAGUCCUGGCAGACUGGUAC
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Spr-2-1 GCCCCACCGGCGCAGGGGAAUAGAAACGCAACCCCGUUUUGGAGAUUGCGGACAGUCCUGGCAGACUGGAC
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env-401 GCGAAGCCAAGGGCGUCUGGAAUAGAUCGCGCUCACCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
env-402AUACGGACCCGAACCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
Ssp-146-1 AGCCCCACCGGCUGGAGGAAACAUCUGCAGUCGCCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
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Ssp-110-1 ACCGCGCGCGGGCGCGGAAUAGAUCGCGGCAACCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
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Sbo-1-1 CGGUGGAGAAACCCGGGAAUACUGAGCCACCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
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Ssp-101-1 GGUCCCGCGGGGCGGAAUUGCGGGGCCCCACCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
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Svi-4-1 CCGCUCACCGGACGCGGAAACAACAACGGCAACCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
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Sye-2-1 CCACCCCGUACGGCCAGGAAUACAAGACCCCGCCCCCGUUUUGGGGAUGACACCAAGUCGAGUCCUGGCAGACUGGUAC
Sse-1-1 GGGGCGCGCGGGCGCGGAAUAGAACAAGCCCAACCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
Sfu-2-1 AGCCCCACCGGCGCGGAAUAGAUCGCGGACCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
Sdu-1-1 GGUUAGCGGUCACCCCGGAAUAGAACAUCGCAACCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
Sip-1-1 GGGGUCGGGCGGAGCGGAAUACGUGGGGUGGCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
Ssc-3-1 CAGUUAUGGUAACGUGGGAAUACUGAGCCACCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
Ssp-59-1 AGCGGUGCGGACGUGGGAAUACCGUGGCGCACCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
Ssp-70-1 UGCGACCCCGACGCCCCGAAUAGAUAAGUCCAGGUCGCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGACC
Ssp-24-1 AGCGCCACACACCCCGGAAUAGAAGAGGACCGCCCGGUUUUGGGGAUGGCCCAAGUCCUGGCAGACUGGUAC
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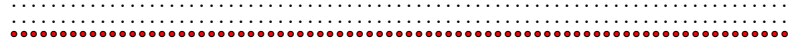
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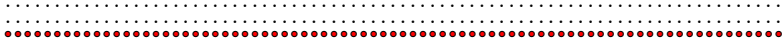
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Rsp-21-1 UCGUUAAGGACUUGAUGCAGCGGUUCUGGCAAGAAUGAUCGACCGCGCGUCGCGCGGUGGAGCACAACAAG
Sar-21-1 CGAUGUUCCGGUUGUCGUAUCCCGCCGUGUGGCCCGCCUGACGAGCCGACACGCGACCCGUGGCACACUGGUAUUCGGCC
Sar-40-1 CGAUGUUCCGGUUGUCGUAUCCCGCCGUGUGGCCCGCCUGACGAGCCGACACGCGACCCGUGGCACACUGGUAUUCGGCC
Sar-27-1 CGAUGUUCCGGUUGUCGUAUCCCGCCGUGUGGCCCGCCUGACGAGCCGACACGCGACCCGUGGCACACUGGUAUUCGGCC
Sar-33-1 CGAUGUUCCGGUUGUCGUAUCCCGCCGUGUGGCCCGCCUGACGAGCCGACACGCGACCCGUGGCACACUGGUAUUCGGCC
Sar-26-1 CGAUGUUCCGGUUGUCGUAUCCCGCCGUGUGGCCCGCCUGACGAGCCGACACGCGACCCGUGGCACACUGGUAUUCGGCC
Sar-22-1 CGGUGUUCCGGUUGUCGUAUCCCGCCGUGUGGCCCGCCUGACGAGCCGACACGCGACCCGUGGCACACUGGUAUUCGGCC
Sar-17-1 CGAUGUUCCGGUUGUCGUAUCCCGCCGUGUGGCCCGCCUGACGAGCCGACACGCGACCCGUGGCACACUGGUAUUCGGCC
Sar-24-1 CGAUGUUCCGGUUGUCGUAUCCCGCCGUGUGGCCCGCCUGACGAGCCGACACGCGACCCGUGGCACACUGGUAUUCGGCC
env-474 CAGACCGUGACGUCACGGAAUGUGGUGCGCGGCCGAAUUCGACCCGCGUGGGCGCGUGGCACACUGGUAUUCGGCC
env-475 GCGGCACCGAAUUCGGUCCGAGCGCGUUCUGGCAUACUCGUCACCGUUGUGCGCCACCCCGGUGCAUCAUCAACAG
Whe-1-1 CGCAGUUUACCGUGCCAGUCCCGCGCGCGCCCGCCUGCCGAGCCGACUCGCCCCGUGGCAGACUGGUUUCGUGGCC
Spa-28-1 CGCAGUUUUGCCGUGGACAGUCCCGCGUGUGGCCCGCCUGCCGCGCCAAACCCACCCCGUGGCAGACUGGUUAGUGGCC
Spa-36-1 CGCAGUUUUGCCGUGGACAGUCCCGCGUGUGGCCCGCCUGCCGCGCCAAACCCACCCCGUGGCAGACUGGUUAGUGGCC
Spa-8-1 AUGCCGACCCCGCGCGCGGUGGACAGACACCGUUGAGGUGCGGACCCGUCUACUGGCAGACUUGACCGACCGCCAU
Dau-1-1 ACGUUGUACGAGUCGGACGAGGUGUGCGGCCCGUUCGCGGUGCGCUCAGGCCAUGGCACACUGGUAUUCGGCC
Mlu-1-1 ACGUUGUACGAGUCGGACGAGGUGUGCGGCCCGUUCGCGGUGCGCUCAGGCCAUGGCACACUGGUAUUCGGCC
Mch-6-1 ACGUUGUACGAGUCGGACGAGGUGUGCGGCCCGUUCGCGGUGCGCUCAGGCCAUGGCACACUGGUAUUCGGCC
Mpa-1-1 ACGUUGUACGAGUCGGACGAGGUGUGCGGCCCGUUCGCGGUGCGCUCAGGCCAUGGCACACUGGUAUUCGGCC
Rsp-9-1 GGGGCACUCGACGACGUCGCGCGCCCGGGAAUUUCUCCCGGGCCUACGUUUUGCAUAAUAGCAGGUCAG
Rrh-2-1 GGGGCACUCGACGACGUCGCGCGCCCGGGAAUUUCUCCCGGGCCUACGUUUUGCAUAAUAGCAGGUCAG
Rsp-14-1 GGGGCACUCGACGACGUCGCGCGCCCGGGAAUUUCUCCCGGGCCUACGUUUUGCAUAAUAGCAGGUCAG
Rsp-5-1 CGCCCGCGGACGCGCGCCGCGGAAUUUCUCCCGGGCCUACGUUUUGCAUAAUAGCAGGUCAG
Rru-2-1 UCCCGCGCGCGCGCGCGGCAUGCCCGGGACGAAUUUCUGUCCCGGGCCUACGUUUUGCAUAAUAGCAGGUCAG
Rru-3-1 UCCCGCGCGCGCGCGCGGCAUGCCCGGGACGAAUUUCUGUCCCGGGCCUACGUUUUGCAUAAUAGCAGGUCAG
Rru-1-1 UCCCGCGCGCGCGCGCGGCAUGCCCGGGACGAAUUUCUGUCCCGGGCCUACGUUUUGCAUAAUAGCAGGUCAG
Ntr-1-1 UGUUUUAGUGCGUGUCACGGUUCUGGCAUACUGGACCCGUGGUGCGUCUGUGGAGAGGACACUCCCGCCUA
Not-2-1 CUGGCGCGCAGCAGCCGAGGGAACCGGAAACAGGCCCGCGAGGCGGCUUUAUCUGGUCGCGGCAACCAUGCCUA
Not-1-1 CCGGCGCGCAGCAGCCGAGGGAACCGGAAACAGGCCCGCGAGGCGGCUUUAUCUGGUCGCGGCAACCAUGCCUA
env-476 GCGGUGUCGCGCGCUCAGCUGGGAAUUCAGGGGGACGGAACGUUAACACGUCUGGCACACUAGAAAGCCGACCA
Msp-26-1 GAGCGUUGCGCGCGGACUUGUCUGUGGGCGCUCGUCGAGUCGGCGGACCGCCGUGGCACACUGGUAUUCGGCC
env-477 GUUCCGGAGGCGCGGGGCGGGGAAUUGCCAGGCCCGGAGGAUUGUUCGUGUGGCACACUAGAAAGCCGAAACAG
env-478 GAUACUUGUC
env-479 CACUUGUC
Gsp-3-1 UGUUCGAGAGCGGCCUCACGCCUUAUUAUUGAUGCCGGUGCGCAGGUCGCGCACCCACCAUGUGCCAGACGGGCCGGA
env-481 GGUUAGAGAGCGGCCUCACGCCUUAUUAUUGGAGAGCUGGUGCGCAGGUCGCGCACCCACUUGUGUCCCGGAGGGCCUGA
env-482 GCGCCCGCGUCCAAAGUCCGGAUUGCCCGGUGACUCGCGCGGUUCGGUACUUGGCACACUUGACUGUGGACCGCC
env-483 CCGCCCGCGCGUCCAAAGUCCGGAUUGCCCGGUGACUCGCGCAGUUAUCUGGCACACUAGAGGGGCAACCGC
env-484 UCGGCAACUAAACGUCGUCACAGGGAUUGCCAGGUCACGGAAGUGGUUCCGCGCGGCACACUAGAAAGCCGAAACCA
env-485 CCGGCGUUCACAGGUCACCGGGAUUAACCGAUGGCCUGGACGUGUAGCGAUCUGGCACACUAGAAAGCCGAAACCA
env-486 CCGGCGGCGCACUGGCACAGGGGAUUAUCCAGACCGGGGAAUUGGUUCCAGGUCGCGCACACUAGAAAGCCGAAACCA
Sam-2-1 GGCCCGGUCUGUCCAGGGCGGGGAUUGUCUUGUGGCCUGGGAUGGUUAGGACUUGGCACACUAGAAAGCCGAAACCGC
Sro-7-1 ACAACGACAGUACUCUAGCGGGAAUUGUCUUGUGGCCUGGGAUGGUUAGGACUUGGCACACUAGAAAGCCGAAACCGC
Sro-3-1 CAAACGACGGUACUUCUCCCGGGAUUGUCUUGUGGCCUGGGAUGGUUAGGACUUGGCACACUAGAAAGCCGAAACCGC
Mau-1-1 UGACGGGUGGGCGCGGUGGGGUGGGGACCCUUGUGCGGGGUAAGAUUGCCGUGGACACUAGAAAGCCGAAACCGC
Msp-9-1 UGACGGGUGGGCGCGGUGGGGUGGGGACCCUUGUGCGGGGUGGAAAGACGCGCGGACACUAGAAAGCCGAAACCGC
Msp-10-1 UGACGGGUGGGCGCGGUGGGGUGGGGACCCUUGUGCGGGGUGGAAAGAUUGCCGUGGCAGACUGGUAUUCGGCC
Msp-28-1 GGCCGGUUGGGGUGGGGACCCUUGUGCGGGGUGGAAAGAUUGCCGUGGCAGACUGGUAUUCGGCC
env-487 CAGACGCCACCAUCCCGGGGAAUCCAGAGGGUACGGAAGUUAUAGCAUCUGGCACACUAGAGCCCGGACCA
env-488 CACCCUUGGCAGUGGACCGAGACCCGUAAGCAGCAGGAAUUAUUAACCGACGUAACUGGUUUGCGGUCUGGCACACUAG
Msp-8-1 GCACGUUACGAAAGCCGACUUGUCUGCGCCCGCCGAGAGGCGCGGCUACGCGCAUGGCACACUAGAAAGCCGAAACCGC
env-489 GACCGAGACCGGUAACGACCGGGAAUUCGACCCGUCAGACUUGGUUACAGGUGUGGCAAAUAGAAAGCCGAAACCGC
env-490 GACCGAGACCGGUAACGACCGGGAAUUCGACCCGUCAGACUUGGUUACAGGUGUGGCAAAUAGAAAGCCGAAACCGC
Nco-1-1 CGCGUGCGGGGUCUGCGCGGGAAUUGCGGAGUGCCUGGGAUGGUUACGACUUGGCACACUAGAAAGCCGAAACCGC
env-494 ACGGUCGGCANUGAUCGCGANGGAAUUGCCAGGCCCGCGCGGUGGUGGUCGCGACACUAGUUAAGCCGAAACCGC
Mca-1-1 GCACGUUACGAAAGCCGACUUGUCUGUGCGCCCGCCGAGAGGCGCGGCUACGCGCAUGGCACACUAGAAAGCCGAAACCGC
env-495 CCGCGCGUGGAGGCCACCGGGAAUUGCCCGCGGGCAUUGUGGUUAACAGUUGCGGACAGUAGAAAGCCGAAACCGC
env-496 ACCACGUCGUCUUCGACCGGGAAUUGCCAGGUCACGGAAAGUGGUUCCAGUACUGGCACACUAGAAAGCCGAAACCGC
env-497 AGGCAACUGACGCGAGGACGGGAAUUGCCCGCGGGGAAUUGCGUUCACGUCUGGCACACUAGAAAGCCGAAACCGC
env-498 CGGCUGACGUCUCCGGACGGGAAUACCAAGGCCCGCGGUAACGUCUUGCAGGGUCUGGCACACUAGAAAGCCGAAACCGC
env-499 CGGCUAACCAACCAACGCGGGAAUACCAAGGCCCGCGGUAACGUCUUGCAGGGUCUGGCACACUAGAAAGCCGAAACCGC
env-500 CAGCUAACCAACCAACGCGGGAAUACCGGGCCCGCGCAUUGUACGAGGUCUGGCACACUAGAAAGCCGAAACCGC
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env-502 GACCCCGGUCGUCUUAAGGGGAAUACCAAGGCCCGGUAACGUCUUGGACGUGGUCACACUAGAAAGCCGAAACCGC
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env-505 GACCCCGGUCGUCUUAAGGGGAAUACCAAGGCCCGGUAACGUCUUGGACGUGGUCACACUAGAAAGCCGAAACCGC
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env-508 GACCCCGGUCGUCUUAAGGGGAAUACCAAGGCCCGGUAACGUCUUGGACGUGGUCACACUAGAAAGCCGAAACCGC
env-509 GACCCCGGUCGUCUUAAGGGGAAUACCAAGGCCCGGUAACGUCUUGGACGUGGUCACACUAGAAAGCCGAAACCGC
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env-511 CUUUGGCACUUGGACGAGGUCUGGCACACUAGAAAGCCGAAACCGC
env-512 CGAGCGAGGCGAGCAGACUCCGGAAUUGCGCGGACCCGUAUUCGUAAGCGGUCUGGCACACUAGAAAGCCGAAACCGC
env-513 GCGCGCGUCGUGAAAGCCCGGGAAUGCCAGUCGGCAACAGUGGUUUCAGGUCUGGCACACUAGAAAGCCGAAACCGC
env-514 AGGCGCGUUCAGGGGCGUGCGGAGGUUCGGCAUACUGGACCGCGGUCGCGAAUCGCGGACACUAGAAAGCCGAAACCGC
Asu-1-1 CUACGUCGCGCGGGAAUAGCCCGGGGACCGGUAUGUGCGGUAAGCAUGUCGUCUUGGCAUACUUGAGCGGCUAC
env-516 CCGGACCAAGGCGCGCGGAAAGGAUUCACAUUGGUAACUUCGUCUUCACGUAUAGCAGACACUAGAAAGCCGAAACCGC
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env-82 CGAGC GUCCGGUUCAGCCGUC AGCA GACGGGACCCGGCG.CCC CGUAUCGAGAGGACCCCG.
env-83 CGAGC GUCCGGUUCAGCCGUC AGCA GACGGGACCCGGCG.CCC CCGUAUCGAGAGGACCCCG.
env-84 CGAGC GUCCGGUUCAGCCGUC AGCA GACGGGACCCGGCG.CCC ACGUAUCGAGAGGACCCCG.
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env-86 CGAGC GUCCGGUUCAGCCGUC AGCA GACGGGACCCGGCG.CCC CCGUAUCGAGAGGACCCCG.
env-87 GCUUG CUCCGGUUCAGCUC.G.CCG ACCC GCGAGUGAGCA.CCCGGC..GCC GUACGGAGCGAAGGAGCUGGA
env-88 GUCGG CUCCGGUUCAGCUCGC AGCA GCGGGGACCCGGCG.GCU GAGGACCCGAGGAAACCC..
Sre-2-1 GCUUG CAACGGUUCACCCGUGGG GGCAUUG GUGUGGGGACCCGGCG.CCC GAGUAGGAGGACAAAGGC
Acy-1-1 CCGGG CUCCGGUUCAGC.CCCGACCCGG.CCCUGGG GAGU GCCAGGCGACCGG.CCCGGGACCCGGCG.CCC CAAGAAGGAAAGGACACAC
Mrh-2-1 CUCGG UCACGGUUCAGCCGAAACCCUCC UGGUCAAC GGAGG GGGGACCCGGG..GCC AACGAUUAGAGGAAACCC..
env-90 CUCGG CCACGGUUCAGCCGUCGG CCUC GACGGGACCCGGG..UCC AUCCAGGAGGAAACACCC
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env-99 ACCGGUUUCCGGUUCAGCUCGGC GGCAACGG GCGGGGACCCGGG..GCC CUCUGAUGGCUUAAAGGAGACCC
env-103 ACCGGUUUCCGGUUCAGCUCGGC GGCAACGG GCGGGGACCCGGG..GCC CUCUGAUGGCUUAAAGGAGACCC
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env-111 ACCGGUUUCCGGUUCAGCUCGGC GGCAACGG GCGGGGACCCGGG..GCC CUCUGAUGGCUUAAAGGAGACCC
Bin-1-1 UCCGG UUCGGUUCAGGUAGCC AUAGG GUGCGGACCCGGG..GCC CUUUGUCUCCUAGGAGUCCAA
env-112 UCCGG UUCGGUUCAGGUAGCC AUAGG GUGCGGACCCGGG..GCC CUUUGUCUCCUAGGAGUCCAA
Bco-1-1 UCCGG UUCGGUUCAGGUAGCC AUAGG GUGCGGACCCGGG..GCC CUUUGUCUCCUAGGAGUCCAA
env-114 AACGG UUCGGUUCAGGC.CCGUGGG AUCC GCGGGGACCCGGG.CCC AGGCAGGAGUUUC
env-115 AACGG UUCGGUUCAGGC.CCGUGGG AUCC GCGGGGACCCGGG.CCC AGGCAGGAGUUUC
env-116 AACGG CUCCGGUUCAGCCACUGGG CUGA GGCA GGGGACCCGGG.CCU AGGCAGGAGUUUC
Sro-4-1 CUCGG CCACGGUUCAGCCGCC GCAAUCCGG GCGGACCCGGG..GCC CCGGACCAUGGAGUCCAGGAGUCCAG
Sgl-4-1 CUCGG CCACGGUUCAGCCGCC GCAAUCCGG GCGGACCCGGG..GCC CUCCCGAACUAGGAGACCC
Sal-8-1 CUCGG CCACGGUUCAGCCGCC GCAAUCCGG GCGGACCCGGG..GCC CUCCCGAACUAGGAGACCC
Sgr-12-1 CUCGG CCACGGUUCAGCCGCC GCAAUCCGG GCGGACCCGGG..GCC CUCCCGAACUAGGAGACCC
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Ssp-62-1 CUCGG CCACGGUUCAGCCGCC GCAAUCCGG GCGGACCCGGG..GCC CUCCCGAACUAGGAGACCC
Ssp-167-1 CUCGG CCACGGUUCAGCCGCCGGG AUCC GUGUGCGACCCGGG..GCC CUCCCGAACGAGGAGACCC
Sav-3-1 CUCGG CCACGGUUCAGCCGACGG GCCC GUGUGCGACCCGGG..GCC CUCCCGAUCCGAGGAGACCC
Ssp-4-1 CCGGG UUCGGUUCAGCCGACGG AUCCGG GUGUGCGACCCGGG..GCC CUCCCGAUCCGAGGAGACCC
Sxi-2-1 GCUUG CUCCGGUUCAGCCGACGG AUCCGG GUGUGCGACCCGGG..GCC CUCCCGAUCCGAGGAGACCC
Ssp-90-1 CUIGG CUCCGGUUCAGCCGACGG AUCCGG GUGUGCGACCCGGG..GCC CUCCCGAUCCGAGGAGACCC
Jal-1-1 GCUUG CUCCGGUUCAGGUCACGAC AUCC GUGUGCGACCCGGG.CCC CAUGAGACCCGAGGAGUCCAG
env-117 CCGGG CUCCGGUUCAGGUC.CCCAGC ACCU GUGGAGAGGACCCGGG.CCC CGAAAUCCAGCCGGCUCAG
env-125 GCGGG UUCGGUUCAGGUCGCAU GAUCA GU CCGGGACCCGGG..GCA CGUUUGAUUAAAGGAGAUCC
Psp-1-1 GCGGG UUCGGUUCAGGUCGCAU GAUCA GU CCGGGACCCGGG..GCA CGUUUGAUUAAAGGAGAUCC
env-126 GCGGG UUCGGUUCAGGUCGCAU UCC GCGGGGACCCGGG.CCC ACGUACCGAGGAAACCC..
Pac-1-1 UUCGG UUCGGUUCAGCCCGCC CGCCGA GCGGGGGACCCGGG.CCC ACGAUGAGGAGACCCGUA
env-127 CUCGG UUCGGUUCAGCCCA GUGCA UGGAGACCCGGG.CCC ACUCGACCCUAGGAGCCGAU
env-128 GCGGG UUCGGUUCAGGUGGC.GG ACCGG CGCCGAGGACCCGGG.CCC CGACCCUAGGAGGAGACAU
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env-131 AGCGG UUCGGUUCAGGAGC.CCGG AGCC GCGGCGGACCCGGG.CCC CAGAACCCGAGGAGACAC
env-132 C.CCG GUCCGGUUCAGGUGG CCGG GCGGACCCGGG.CCC ACAGACUAGGAGGACCA
env-133 A.CCG GUCCGGUUCAGGUGG UCGC GGACCGACCCGGG.CCC ACGAUGAGGAGGACCC..
Bth-2-1 GACGG UUCGGUUCAGCCGCC AUAGG GGUUGGGACCCGG..GCC CCGCCGAUUCCAUAGGAGACCA
Bsc-1-1 AUAGG UUCGGUUCAGCCGCC AUAGG GGUUGGGACCCGGG..UCC CCGGAUUCCAUAGGAGACCA
Bth-7-1 GACGG UUCGGUUCAGCCGCC AUAGG GGUUGGGACCCGGG..UCC UGAUUCCAUAGGAGACCA
Bth-8-1 GACGG UUCGGUUCAGCCGCC AUAGG GGUUGGGACCCGGG..UCC CCGGAUUCCAUAGGAGACCA
Bth-5-1 GACGG UUCGGUUCAGCCGCC AUAGG GGUUGGGACCCGGG..UCC CCGGAUUCCAUAGGAGACCA
Bth-3-1 GACGG UUCGGUUCAGCCGCC AUAGG GGUUGGGACCCGGG..UCC CCGGAUUCCAUAGGAGACCA
Bth-6-1 CAAGG UUCGGUUCAGCCGCC AUAGG GGUUGGGACCCGGG..UCC CCGGAUUCCAUAGGAGACCA
Bbo-2-1 GAGGG UUCGGUUCAGCCGCC AUAGG GGUUGGGACCCGGG..UCC CCGGAUUCCAUAGGAGACCA
env-136 GCUUG CUCCGGUUCAGCCUCUC GCAGG GAGGGGACCCGGG.CCC GAGGAGGAGACCC..
Nsp-4-1 CUIGG CUCCGGUUCAGCCUCUC GCAGG GAGGGGACCCGGG.CCC GAGGAGGAGACCC..
env-137 GCUUG UUCGGUUCAGGUCC.CACGGG ACCA GCGGGUACCCGGGACCCGGG.CCC GAUGAGGAGACCC..
env-138 CUCGG UCCGGUUCAGGCC.GCACAUCCUUCCGGUC CAUUC GCGGGG.GGGAG GGGGACCCGGG..GCC GAAACCCUCCGAGGAGACCC..
env-139 CUCGG UCCGGUUCAGGCC.GCACAUCCUUCCGGUC CAUUC GCGGGG.GGGAG GGGGACCCGGG..GCC CCGGAGGAGGAGGAGGCC..
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env-142 AACGG UUCGGUUCAGGGGG CGAUCCGGACACGCCCGCCCGUCUAGGAGCAC CGCCGACCCGGG.CCC CCGGUUCGCGCCAGUCCGGGUCGCAC
Fsp-8-1 CCGGG UUCGGUUCAGGCUUGG CAUAUUUA CGCAGGACCCGGG.CCC CGCGUCCGCGCCAGUCCGGGUCGCAC
env-143 CUCGGCUUCGCUUCAGGGGG ACCCG CGCAGGACCCGGG.CCC CGCAGGACCCGGG.CCC CGCGUCCGCGCCAGUCCGGGUCGCAC
Nsp-10-1 GCUUG CUCCGGUUCAGCCACCC GUAGG GCGGACCCGGG.CCC GAGG.GGGGACCCGGG.CCC GAGGAGGAGACCC..
env-144 CCGGG UUCGGUUCAGGAGUCCGCUUGGGGG GCUCGAUG CAGUGC.GGG CCGG.UCCGACCCGGG.CCC GAGGAGGAGACCC..
Cja-1-1 AGCGG UUCGGUUCAGCCGUCGAGC AGCC GCUCCGAGACCCGGG.CCC CCGG.UCCGACCCGGG.CCC GAGGAGGAGACCC..
Fsy-1-1 CCGGG CAACGGUUCAGCCGUCGUC AGG GGAC.AGGGGACCCGGG.CCC CCGG.UCCGACCCGGG.CCC GAGGAGGAGACCC..
Fco-1-1 CCGGG CAACGGUUCAGCCGUCGUC AGG GGAC.AGGGGACCCGGG.CCC CCGG.UCCGACCCGGG.CCC GAGGAGGAGACCC..
env-145 UCAGE UAACGGUUCAGCCCGGGG AAUCCA UCCAGGACCCGGG.CCC UCCAGGACCCGGG.CCC CAACGAGGAGACCC..
Ply-1-1 CUCGG UUCGGUUCAGGCC UUAUUCGUU GGGGACCCGGG.CCC GGGGACCCGGG.CCC AGACAGGAGAAUA
Ply-2-1 UUCGG UUCGGUUCAGGCC UUAUUCGUU GGGGACCCGGG.CCC GGGGACCCGGG.CCC AGACAGGAGAAUA
Ssc-2-1 CUCGG CCACGGUUCAGGUGACCC ACUC GGGG.UCCGACCCGGG..GCC GGGG.UCCGACCCGGG..GCC CUCCCGAAACCCAGGAGAUCC
Sri-4-1 CUCGG UCCGGUUCAGGUGACCC AAUCA GGCCACCCGGG..GCC GGCCACCCGGG..GCC CUCCCGAAACCCAGGAGAUCC
Sri-2-1 CUCGG UCCGGUUCAGGUGACCC AAUCA GGCCACCCGGG..GCC GGCCACCCGGG..GCC CUCCCGAAACCCAGGAGAUCC
Sgr-6-1 CUCGG UCCGGUUCAGGUGACCC AAUCA GGCCACCCGGG..GCC GGCCACCCGGG..GCC CUCCCGAAACCCAGGAGAUCC
Sri-4-16 CUCGG CCACGGUUCAGGUGACCC AAUCA GGCCACCCGGG..GCC GGCCACCCGGG..GCC CUCCCGAAACCCAGGAGAUCC
Ssp-75-1 CUCGG CCACGGUUCAGGUGACCC AAUCA GGCCACCCGGG..GCC GGCCACCCGGG..GCC CUCCCGAAACCCAGGAGAUCC

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 Ssp-173-1 GUCGG. CCGGGUUCAGGU. CCGGC. AUCCC. GGGGGCGGACCGGG. GCG. CUCCCGAAACCUAGGAGACCC
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 Ssp-61-1 GUCGG. CUCCGGUUCAGGU. CCGGC. AUCCC. GGGGGCGGACCGGG. GCG. CUCCCGAAACCUAGGAGACCC
 Ssp-175-1 GUCGG. CCGGGUUCAGGU. CCGGC. AACCC. GGGGGCGGACCGGG. GCG. CUCCCGAAACCUAGGAGACCC
 Fsp-6-1 AGCGG. CUCCGGUUCAGGUCCCGG. GCCC. GGGG. GGGACCGGGG. GCG. ACAUCGAAAGAGGGACC
 Fsp-13-1 AACGG. CUCCGGUUCAGGUCCUC. AUCC. GAGCGGGA. CCGGGG. GCG. ACAUCGAAAGAGGGACC
 Fal-1-1 GACGG. CUCCGGUUCAGGUCCUC. AUCC. GAGCGGGA. CCGGGG. GCG. ACAUCGAAAGAGGGACC
 Gte-4-1 UGCGG. UACCGGUUCAGGGCC. GCG. CCGGG. GAA. GCGGUGGACGGGGG. CCGGG. ACC. GAACGAGAGGGAAACUC
 Mrh-1-1 UCAGG. UACCGGUUCAGGUCGUAUACGAGG. GAAAA. CGUGGU. GGGGAC. CCGGGG. ACC. ACAGAAUCGAGAGGACCC
 env-419 CCGGG. CUCCGGUUCAGGG. CGCACGUCCA. GGGGAC. CCGGGG. GCG. ACCUGAAAGGGAUCCAG
 env-421 CCGGG. CUCCGGUUCAGGG. CGCACGUCCA. GGGGAC. CCGGGG. GCG. ACCUGAAAGGGAUCCAG
 env-422 CCGGG. CUCCGGUUCAGGG. CGCACGUCCA. GGGGAC. CCGGGG. GCG. ACCUGAAAGGGAUCCAG
 env-423 UGCGG. UACCGGUUCAGGUCGUAUGG. CUCUGUUGGUCUUGGGGG. ACGA. CCGCCAGGCC. CGGAAA. CCGAGAGGGGAC. CCGGGG. ACC. GCGAAGGGCAGGAGUUGU
 env-424 CGCGG. UACCGGUUCAGGUCGAGCGG. CAUCA. GCGCGCGGGG. CCGGGG. ACC. GACCAAGGCAGGAGUACAC
 env-425 CGCGG. UACCGGUUCAGGUCGAGCGG. CAUCA. GCGCGCGGGG. CCGGGG. ACC. GACCAAGGCAGGAGUACAC
 env-426 CGCGG. UACCGGUUCAGGUCGAGCGG. CAUCA. GCGCGCGGGG. CCGGGG. ACC. GACCAAGGCAGGAGUACAC
 Nsp-11-1 CGCGG. UACCGGUUCGCGCA. UG. AGUU. CAUUGGGA. CCGGGG. ACC. GCACCAGGAAAGGACAGCC
 env-428 CGCGG. UACCGGUUCAGGUACGAAAGCC. AGC. CC. CAU. GGUGUCGGCA. GUGGGA. CCGGGG. ACC. GCACGAGGCAAGGAGGAA
 env-429 CGCGG. UACCGGUUCAGGUCA. AGUAC. AGUAC. UGGGGA. CCGGGG. ACC. GCUGAGGCAAGGAGGCAAC
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 env-431 UGAGG. UUCGGGUUCAGGUCC. AAUAGCUCAUA. GGGGGA. CCGGGG. ACC. GACGAUUGAAGAGGACAU
 env-432 UGAGG. UUCGGGUUCAGGUCC. AAUAGCUCAUA. GGGGGA. CCGGGG. ACC. GACGAUUGAAGAGGACAU
 env-433 UCAGG. UUCGGGUUCAGGUCC. ACGAACUCAUA. GGGGGA. CCGGGG. ACC. GACGAUUGAAGAGGACAU
 env-434 UCAGG. UUCGGGUUCAGGUCCGAUU. UACCAGCAC. GAUCUGGGA. CCGGGG. ACC. GACUACUGAAGAGGACAU
 env-435 UCAGG. UUCGGGUUCAGGUCCGAUU. UCUUGUCAC. GAUCUGGGA. CCGGGG. ACC. GAUUAUCGAAAGGACAU
 Str-2-1 ACCGG. UUCGGGUUCAGGCGCUGCCGUGG. UACACC. CCGGG. CCGGGGAC. CCGGGG. ACC. ACCAACGAGAGGACCGAGG
 Str-1-1 ACCGG. UUCGGGUUCAGGCGCUGCCGUGG. UACACC. CCGGG. CCGGGGAC. CCGGGG. ACC. ACCAACGAGAGGACCGAGG
 Spa-24-1 ACCGG. UUCGGGUUCAGGCGCAGUCCGUGG. UACACC. CG. CGGC. CCGGGGAC. CCGGGG. ACC. ACCAACGAGAGGACCGAGG
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 Spa-27-1 ACCGG. UUCGGGUUCAGGCGCAGUCCGUGG. CACAC. CCACGG. UGGGGA. CCGGGG. ACC. ACCAACGAGAGGACCGAGG
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 Spa-38-1 ACUGG. UUCGGGUUCAGGCGCAGUCCGUGG. UACACC. CCGGG. CCGGGGAC. CCGGGG. ACC. ACCAACGAGAGGACCGAGG
 env-436 UCAGG. UUCGGGUUCAGGCGCAGUAC. CAGGUCA. GAAA. CCGGGGA. CCGGGG. GCG. GACUACUGAAGAGGACAU
 Msp-11-1 UCAGG. UACCGGUUCAGGUCCGA. AUUG. CAG. GUAAAA. CCGGGGAC. CCGGGG. ACC. AUUGAUCGAGAGGACAU
 env-437 UCAGG. UUCGGGUUCAGGCGC. GCG. GGGGGA. CCGGGG. ACC. ACUGAGACAGGAGGACAU
 env-438 UCAGG. UUCGGGUUCAGGUCCGAUUAC. AAGCUCA. GUA. GGGGGA. CCGGGG. ACC. ACCGACGAGAGGACAU
 env-440 CUUGG. UUCGGGUUCAGGUCCGA. CCG. UCGGGGGA. CCGGGG. ACC. UGAAACCUAGGAGGACUGU
 env-441 UGCGG. UACCGGUUCAGGUUCU. CGUGGC. UCU. GCGAGU. UAGGGGA. CCGGGG. ACC. GCGGACGAGGAGUUGU
 env-442 UGCGG. UACCGGUUCAGGUCUUGG. CUCUGGGGG. ACGA. CCGCCAGGCC. CCGAGAA. CCGGGG. ACC. GCGGACGAGGAGUUGU
 Gkr-1-1 UCAGG. UUCGGGUUCAGGCGC. UGC. CCGUGGGA. CCGGGG. ACC. ACAGAAAGGACAU
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 env-446 GCGGG. UUCGGGUUCAGGUCGG. ACCC. GGG. GGA. CCGGGG. GCG. CCGGACCGGAGGAGGACAU
 env-447 UCAGG. UUCGGGUUCAGGUCGG. ACCU. CGCAGGGGA. CCGGGG. ACC. CUGAGCGAAGGACAU
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 env-449 UCAGG. UUCGGGUUCAGGUCGG. GACC. CGCAGGGGA. CCGGGG. ACC. CUGAAACGAAAGGAC
 Mhe-1-1 UCAGG. UUCGGGUUCAGGUCGG. ACAU. GGCAGGGGA. CCGGGG. GCG. GACGAUUGAAGAGGACAU
 Rrh-1-1 UCAGG. UUCGGGUUCAGGUCGG. GCAGG. CGAAGGUA. CCGGGG. GCG. AUUGAAAGGACAU
 Msp-13-1 UCAGG. UUCGGGUUCAGGUCGGUC. ACUUC. GAAGGGGGGA. CCGGGG. GCG. AACGAUUGAAGAGGACAU
 env-450 UCAGG. UUCGGGUUCAGGACUUGGAA. AUCC. UUCGAGGGGA. CCGGGG. ACC. AUUCGAGAGGACAU
 Tbi-1-1 UCAGG. UUCGGGUUCAGGACUUGGAA. AACC. UGAGGGGGA. CCGGGG. ACC. AUUCGAGAGGACAU
 Msp-4-1 UCAGG. UUCGGGUUCAGGUCCAGCC. CACG. GGGGGGGA. CCGGGG. ACC. CACGAUCGAAAGGACAU
 Mav-1-1 UCAGG. UUCGGGUUCAGGUCCAGCC. CAAG. GGG. GGGGGA. CCGGGG. ACC. CACGAUCGAAAGGACAU
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 env-453 UCAGG. UUCGGGUUCAGGCCC. GCAAGCCAGGUUCGAAUCUCA. GGGGGA. CCGGGG. ACC. ACCUACGAAAGGACAU
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 Sar-43-1 ACUGG. UUCGGGUUCAGGUCCGAGC. UCGCACAU. CGCAGUCGGGGGA. CCGGGG. ACC. ACCGACGAGAGGACCGAGG
 Sar-11-1 AUUGG. UUCGGGUUCAGGUCCGAGC. UCGCACAU. CGCAGUCGGGGGA. CCGGGG. ACC. ACCGACGAGAGGACCGAGG
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 env-456 GGAGG. UUCGGGUUCAGGCCCC. AGUCC. CGAGGGGA. CCGGGG. ACC. GCAGACAGGAGGACCGU
 Ase-1-1 UGAGG. UUCGGGUUCAGGCCCCGUGG. ACAGG. CGCC. UGGGGA. CCGGGG. ACC. UACCGAGAGGACCGCC
 Fsp-9-1 ACCGG. CUCCGGUUCAGGCCCCUUC. ACUCG. GAAGGGGA. CCGGGG. GCG. AUUCGAAAGAGGGACC
 env-457 ACCGG. CUCCGGUUCAGGCCCCUUC. ACCCG. GGGUGAGGGGGA. CCGGGG. GCG. AUUCGAAAGAGGGACC
 env-459 ACCGG. CUCCGGUUCAGGCCCCUUC. ACCCG. GGGUGAGGGGGA. CCGGGG. GCG. ACCGGAAGGAGGACCGCC
 env-460 AGCGG. UUCGGGUUCAGGCCCC. CCGCGGC. ACCCCGGUGUCACGCGCGAAGCCUCACAG. GGGGGA. CCGGGG. ACC. GCGUUUGGA
 Spa-33-1 ACCGG. UUCGGGUUCAGGCCCCUUCGUGUA. CACC. UCGCGCC. GGGGGA. CCGGGG. ACC. ACCAACGAGAGGACCGAGG
 Vma-1-1 ACCGG. UUCGGGUUCAGGCCCCUUGAUCGGCGGG. AGCG. GGGGGA. CCGGGG. ACC. ACCGACGAGAGGACCGAGG
 Gbr-1-1 UCAGG. UUCGGGUUCAGGCCCC. AGACA. CGACGGGUA. CCGGGG. ACC. ACAGAAAGGGACCA
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 Gal-1-1 UCAGG. UUCGGGUUCAGGCCCC. AGAGG. CGACGGGUA. CCGGGG. ACC. CCAGAAAGGGACCA
 Gam-2-1 UCAGG. UUCGGGUUCAGGCCCC. AGAGG. CGAGGGUA. CCGGGG. ACC. ACAGAAAGGGACCA
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 Gam-3-1 UCAGG. UUCGGGUUCAGGCCCC. ACAGG. CGAGGGUA. CCGGGG. ACC. AUAGAAAGGGACCA
 Gte-3-1 UCAGG. UUCGGGUUCAGGCCCC. ACAAG. CGACGGGUA. CCGGGG. ACC. ACAGAAAGGGACCA
 Nsp-1-1 UCAGG. UUCGGGUUCAGGCCCC. AUCCG. CGAAGGUA. CCGGGG. ACC. AUGAAAGGGACCA

Wsp-1-1 UCCGG UUCCGGUUCACCCUUCG AUCCG CGAAGGUGACCCGGC ACC AUUGAAAAGGACACCA
Kar-2-1 UCCGG UUCCGGUUCACCCUUCG AUCCG CGAAGGUGACCCGGC ACC AUUGAAAAGGACACCA
Gef-1-1 UCCGG UUCCGGUUCACCCUUCG AUCCA CGAUGGUGACCCGGC ACC AUGGAAAAGGACAUCC
env-461 UCCGG UUCCGGUUCACCCUUCG AUCCA CGAUGGUGACCCGGC ACC ACGAGAAAAGGACACCG
Gpo-3-1 UCCGG UUCCGGUUCACCCGACG AUCCG CGCGGUGACCCGGC ACC ACGGAAAAGGACACCA
Grh-1-1 UCCGG UUCCGGUUCACCCGUCG AUCCG CGACGGUGACCCGGC ACC AUAGAAAAGGACACCA
env-462 UCCGG UUCCGGUUCAGGUACU GACU GAGGGGACCCGGC ACC UUGAAAAGGACGGA
Rde-1-1 UCCGG UUCCGGUUCAGGUUCG AAUGG CGAGGUGACCCGGC ACC AUUGAAAAGGACACC
Req-3-1 UCCGG UUCCGGUUCAGGCGUCG AACGG CGAGGACGACCCGGC GCC AUCCGAAAAGGACACC
env-463 UCCGG UUCCGGUUCAGGUUCG AACGG CGAGGACGACCCGGC ACC AUUGAAAAGGACACC
Rfa-3-1 UCCGG UUCCGGUUCAGGUUCG AACGG CGAGGACGACCCGGC ACC AUUGAAAAGGACACC
Rsp-2-1 UCCGG UUCCGGUUCAGGUUCG AACGG CGAGGACGACCCGGC ACC AUUGAAAAGGACACC
Rsp-3-1 UCCGG UUCCGGUUCAGGUUCG ACAAG CGAAGGGAACCCGGC ACC ACUACGAAAGACGGUAAAGGACACC
Rfa-12-1 UCCGG UUCCGGUUCAGGUUCG AUCCG CGAAGGGAACCCGGC ACC ACUAGAGAGAACGGUAAAGGACACC
Rsp-13-1 UCCGG UUCCGGUUCAGGUUCG AUCCG CGAAGGGAACCCGGC ACC AUUGAAAAGGACACC
Rop-1-1 UCCGG UUCCGGUUCAGGUUCG AUCCG CGAAGGGAACCCGGC ACC AUUGAAAAGGACACC
Rfa-21-1 UCCGG UUCCGGUUCAGGUUCG AUCCG CGAAGGGAACCCGGC ACC AUUGAAAAGGACACC
Rfa-1-2 UCCGG UUCCGGUUCAGGUUCG AUCCG CGAAGGGAACCCGGC ACC AUUGAAAAGGACACC
Rfa-4-1 UCCGG UUCCGGUUCAGGUUCG AUCCG CGAAGGGAACCCGGC ACC AUUGAAAAGGACACC
Rfa-7-1 UCCGG UUCCGGUUCAGGUUCG AUCCG CGAAGGGAACCCGGC ACC AUUGAAAAGGACACC
Rfa-20-1 UCCGG UUCCGGUUCAGGUUCG AUCCG CGAAGGGAACCCGGC ACC AUUGAAAAGGACACC
Rfa-8-1 UCCGG UUCCGGUUCAGGUUCG AUCCG CGAAGGGAACCCGGC ACC AUUGAAAAGGACACC
Rtr-1-1 UCCGG UUCCGGUUCAGGUUCG AUCCG CGAAGGGAACCCGGC ACC AUUGAAAAGGACACC
Rsp-19-1 UCCGG UUCCGGUUCAGGUUCG AUCCG CGAAGGGAACCCGGC ACC AUUGAAAAGGACACC
Rsp-21-1 UCCGG UUCCGGUUCAGGUUCG AUCCG CGAAGGGAACCCGGC ACC AUUGAAAAGGACACC
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Sar-27-1 AUCCG UUCCGGUUCAGGUUCGACUCCGUCG ACAACC GCGAC CCGGGGACCCGGC ACC ACCGACGAGAGGACCGAGG
Sar-33-1 AUCCG UUCCGGUUCAGGUUCGACUCCGUCG ACAACC GCGAC CCGGGGACCCGGC ACC ACCGACGAGAGGACCGAGG
Sar-26-1 AUCCG UUCCGGUUCAGGUUCGACUCCGUCG ACAACC GCGAC CCGGGGACCCGGC ACC AUCCACGAGAGGACCGAGG
Sar-22-1 AUCCG UUCCGGUUCAGGUUCGACUCCGUCG ACAACC GCGAC CCGGGGACCCGGC ACC ACCGACGAGAGGACCGAGG
Sar-17-1 AUCCG UUCCGGUUCAGGUUCGACUCCGUCG ACAACC GCGAC CCGGGGACCCGGC ACC ACCGACGAGAGGACCGAGG
Sar-24-1 AUCCG UUCCGGUUCAGGUUCGACUCCGUCG ACAACC GCGAC CCGGGGACCCGGC ACC ACCGACGAGAGGACCGAGG
env-474 AUCCG UUCCGGUUCAGGCGC GAGUCCGUGCCCGCGCG ACCAUC GCGACA UGGGGACCCGGC ACC AUCCGAGAAAAGGACCGAGGCGAC
env-475 AUCCG UUCCGGUUCAGGCGC CG AGCC CCGC ACCU UGCGCGCGGGU CGGAGCGCGAGGGGGACCCGGC ACC AUCCGAGAAAAGGACCGAGG
Whe-1-1 UCCGG UUCCGGUUCAGCCGCGC CCGC ACAC GCGGAC CCGGGGACCCGGC ACC AUUGAAAAGGACACCA
Spa-28-1 AUCCG UUCCGGUUCAGGCGCAUCUGUCG ACAACC GCGGAC CCGGGGACCCGGC ACC ACCAACGAGAGGACCGAGG
Spa-36-1 AUCCG UUCCGGUUCAGGCGCAUCCGUCG ACAC GCGGC UGGGGACCCGGC ACC ACCAACGAGAGGACCGAGG
Spa-8-1 AUCCG UUCCGGUUCAGGCGCAUCCGUCG ACAC GCGGC UGGGGACCCGGC ACC ACCAACGAGAGGACCGAGG
Dau-1-1 CCGGG UUCCGGUUCAGGCG ACAC GCGGC UGGGGACCCGGC ACC ACUGAACGAGGACCGAGG
Mlu-1-1 AUCCG UUCCGGUUCAGGCGC CG AGCCCGUGCGU ACG GCGGAC CCGGGGACCCGGC ACC ACCAACGAGAGGACCGAGG
Mch-6-1 AUCCG UUCCGGUUCAGGCGC CG AGCCCGUGUGU ACG GCGGC UGGGGACCCGGC ACC ACCAACGAGAGGACCGAGG
Mpa-1-1 AUCCG UUCCGGUUCAGGCGC CG AGCCCGUGCGU ACG GCGGC UGGGGACCCGGC ACC ACCAACGAGAGGACCGAGG
Rsp-9-1 UCCGG CUCCGGUUCAGGUUCG ACCCG GCGGAC CCGGGGACCCGGC ACC ACUGAACGAGGACCGAGG
Rrh-2-1 UCCGG CUCCGGUUCAGGUUCG ACCCG GCGGAC CCGGGGACCCGGC ACC ACCAACGAGAGGACCGAGG
Rsp-14-1 UCCGG CUCCGGUUCAGGUUCG ACCCG GCGGAC CCGGGGACCCGGC ACC ACCAACGAGAGGACCGAGG
Rsp-5-1 UCCGG UCUCGGUUCAGGUUCG AUCCG GCGGAC CCGGGGACCCGGC ACC ACCAACGAGAGGACCGAGG
Rru-2-1 UCCGG UCUCGGUUCAGGUUCG AUCCG GCGGAC CCGGGGACCCGGC ACC ACUGAACGAGGACCGAGG
Rru-3-1 UCCGG UCUCGGUUCAGGUUCG AUCCG GCGGAC CCGGGGACCCGGC ACC ACCAACGAGAGGACCGAGG
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Not-1-1 UCCGG UCUCGGUUCAGGUUCG AUCCG GCGGAC CCGGGGACCCGGC ACC ACCAACGAGAGGACCGAGG
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env-477 UCCGG UAUCGGUUCAGGCGC CCGGCGUG GCAUUA CAUCGCGCGGGGACCCGGC ACC GCGGACGAGGACGAGGUAUAC
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Gsp-3-1 UCCGG UUCCGGUUCAGGCGUA CCGG UAGCGGACCCGGC ACC CCGGAAAAGGGAAGUC
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env-485 AGCGG UAUCGGUUCGCGC CCGCGUUCAGGUGU GCGGAC GCGGACCGGCG ACC GCGUAGGCGGAGGAGAAC
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Sam-2-1 AGCGG UUCCGGUUCGCGCGC GCGCGUUCAGGUGU GCGGAC GCGGACCGGCG ACC GCGUAGGCGGAGGAGAAC
Sro-7-1 AGCGG UUCCGGUUCGCGCGCGC GCGCGUUCAGGUGU GCGGAC GCGGACCGGCG ACC GCGUAGGCGGAGGAGAAC
Sro-3-1 AGCGG UUCCGGUUCGCGCGCGC GCGCGUUCAGGUGU GCGGAC GCGGACCGGCG ACC GCGUAGGCGGAGGAGAAC
Mau-1-1 AUCCG UUCCGGUUCAGGCGC CG AGCCCGUGC UGA CGACGGG CGCACCGACCGGACCCGGC ACC ACCGACGAAAAGGACCGAGG
Msp-9-1 AUCCG UUCCGGUUCAGGCGC CG AGCCCGUGC UGA CGACGGG CGCACCGACCGGACCCGGC ACC ACCGACGAAAAGGACCGAGG
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Aha-2-1 UU.....AUG
 env-29AUG
 Sni-1-1AUG
 env-30AUG
 Asp-2-1 AGAAGAC..AUG
 env-31 CGAC.....AUG
 Hal-1-1AUG
 env-32AUG
 Ssp-169-1AUG
 Dsp-2-1AUG
 Mel-1-1AUG
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 Car-1-1AUG
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 Asp-3-1 CU.....AUG
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 Mth-1-1AUG
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 Ssp-96-1AUG
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 Ssp-148-1AUG
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 Ssp-164-1UUG
 Svi-13-2UUG
 Ssp-28-1AUG
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 Ssp-143-1UUG
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 Ska-1-1AUG
 Sro-6-1UUG
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 Ssp-131-1UUG
 Ssp-86-1AUG
 Sla-1-1UUG
 Ssp-166-1UUG
 Svi-13-3AUG
 Dsp-1-1 AC.....AUG
 Dho-1-1 AC.....AUG
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 Bfa-1-1AUG
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 env-45AUG
 env-46AUG
 Bmu-1-1 CG.....AUG
 Bsqa-1-1 CG.....AUG
 Sba-1-1AUG
 env-47 CC.....AUG
 env-48AUG
 env-49AUG
 env-50 C.....GUG
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 env-52AUG
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 env-54 C.....GUG
 env-55AUG
 env-56 GAGUA...AUG
 env-57AUG
 env-59 C.....AUG
 Spo-1-1AUG
 env-60AUG
 env-61 GA.....AAG
 Ssp-51-1 UUG.....AAG
 Sji-1-1 C.....AUG
 Aut-1-1 AAGAC...AUG
 Mtu-1-1AUG
 Cko-1-1 GGCG...AUG
 Nla-1-1 U.....AUG
 Nsp-9-1 C.....AUG
 env-62AUG

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 env-64 AAGAC... AUG
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 Npn-1-1 AUG
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 Acy-1-1 CU..... GUG
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 Bco-1-1 U..... AUG
 env-114 ACA..... GUG
 env-115 ACA..... AUG
 env-116 AUG
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 Sgl-4-1 UUG
 Sal-8-1 UUG
 Sgr-12-1 UUG
 Ssp-55-1 UUG
 Ssp-62-1 UUG
 Ssp-167-1 AUG
 Sav-3-1 C..... AUG
 Ssp-4-1 AUG
 Sxi-2-1 AUG
 Ssp-90-1 AUG
 Jal-1-1 AGC..... AUG
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 Psp-1-1 GU..... AUG
 env-126 AUG
 Pac-1-1 A..... AUG
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 env-130 ACCC..... AUG
 env-131 ACCC..... GUG
 env-132 UC..... AUG
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 Bsc-1-1 CC..... AUG
 Bth-7-1 CC..... AUG
 Bth-8-1 CC..... AUG
 Bth-5-1 CC..... AUG
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 Bth-6-1 CC..... AUG
 Bbo-2-1 CC..... AUG
 env-136 AUG
 Nsp-4-1 AUG
 env-137 AUG
 env-138 AUG
 env-139 AUG
 env-140 AUG

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env-141
 env-142
 Fsp-8-1AUG
 env-143
 Nsp-10-1
 env-144
 Cja-1-1 CAC.....
 Fsy-1-1AUG
 Fco-1-1
 env-145
 Ply-1-1 AA.....AUG
 Ply-2-1 AA.....AUG
 Ssc-2-1 U.....
 Sri-4-1 C.....UUG
 Sri-2-1 C.....UUG
 Sgr-6-1 C.....UUG
 Sri-4-16 C.....
 Ssp-75-1 C.....UUG
 Sri-4-18 C.....UUG
 Sri-4-19 C.....UUG
 Sri-4-20 C.....UUG
 env-146
 env-147
 env-148
 Nal-1-1 C.....
 env-149 C.....
 Ssp-36-1
 Ssp-109-1
 Ssp-35-1
 Ssp-34-1
 Ssp-42-1
 env-150 GGC.....
 Mau-2-1
 env-151
 env-153 CC.....AUG
 Psp-10-1
 env-154
 env-156
 env-157 A.....GUG
 env-158 A.....
 env-159 A.....GUG
 env-160 A.....
 Mha-1-1AUG
 env-161
 env-162 AAG.....AUG
 env-163 CC.....
 env-164 AGAC.....
 Asp-5-1 C.....
 env-165 GU.....AAU
 Nlu-1-1AUG
 Nba-1-1
 Ssp-177-1
 Lal-1-1 G.....
 Gma-1-1
 Bme-1-1
 Bsu-2-1AUG
 Bre-1-1 A.....AUG
 Blo-34-1 AA.....AUG
 env-166 AA.....
 Blo-22-1 AA.....AUG
 env-167 AA.....
 env-170 AA.....
 env-196 AA.....
 Blo-19-1 AA.....AUG
 env-197 AA.....
 env-216 AA.....
 env-217 AA.....
 env-219
 Ssp-47-1
 Sma-2-1
 Nrh-1-1AUG
 Nte-2-1
 Nsp-2-1
 env-220AUG
 env-221
 env-222
 env-223 C.....
 env-224 C.....
 env-225 AA.....GUG
 env-226 C.....GUG
 env-227
 env-228 C.....GUG
 env-229 U.....
 env-230 CU.....

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env-231 AUG
 env-232 GUG
 env-233 AUG
 Fsp-3-1 AUG
 Ssy-1-1 CG AUG
 Ssp-54-1 AUG
 Ssp-174-1 AUG
 Ssp-32-1 AUG
 Sxy-1-1 AUG
 env-237 G AUG
 env-238 G AUG
 env-239 G AUG
 env-240 AUG
 Ssp-102-1 C AUG
 Sca-3-1 AUG
 Ghi-1-2 AU AUG
 Ssc-5-1 AUG
 Sro-5-1 C AUG
 Sva-2-1 C AUG
 Sye-1-1 AUG
 env-241 AUG
 env-242 AUG
 Nex-1-1 AUG
 Nar-1-1 AUG
 Nab-1-1 AUG
 Mar-1-1 AUG
 env-243 AUG
 env-244 AUG
 env-245 AUG
 Agl-1-1 GAAAC AUG
 Msp-15-1 AUG
 Mco-2-1 AUG
 env-248 AUG
 env-249 AUG
 Nmu-1-1 G AUG
 env-250 CG AUG
 env-252 CG AUG
 env-253 AUG
 env-254 AUG
 env-255 AUG
 env-256 AUG
 env-257 AUG
 env-258 AUG
 env-259 GC GUG
 env-260 C AUG
 env-261 CU AUG
 env-262 U AUG
 env-263 ACCCCAUC AUG
 env-264 CC AUG
 env-265 UUG
 env-266 UU AUG
 Nth-1-1 AUG
 Pan-1-1 AUG
 Sxi-1-1 AUG
 Ssa-1-1 AUG
 Mch-1-1 AUG
 env-267 AUG
 env-268 AUG
 env-274 AUG
 Pas-1-1 AUG
 Pdi-1-1 AUG
 env-279 AUG
 env-280 GUG
 Ame-4-2 AUG
 Asp-4-1 AUG
 Ath-1-1 AUG
 Sbi-1-1 C AUG
 Shy-4-1 C UUG
 Ssp-73-1 C AUG
 Sir-1-1 C AUG
 Ssp-165-1 C AUG
 Svi-3-1 C AUG
 env-281 C GUG
 env-282 C AUG
 env-283 AA AUG
 env-288 AUG
 env-289 AUG
 env-290 C AUG
 Gar-1-1 AUG
 Mro-1-1 C AUG
 env-291 AUG
 env-292 AUG
 Psu-1-1 A AUG
 Gne-1-1 C AUG

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Gsi-1-1 AUG
 Gsi-2-1 AUG
 Nta-1-1 AUG
 env-293 AUG
 env-294 AUG
 env-295 AUG
 env-298
 Mob-1-1 AUG
 Mob-1-2 AUG
 env-299 CUUCC AUG
 Asp-1-1 CACAC AUG
 env-300 CACCC AUG
 env-301 CACCC AUG
 env-302 AUG
 env-303 AUG
 Nsp-6-1 AUG
 env-304 AUG
 env-306 AUG
 env-307 AUG
 env-308 AUG
 env-309 AUG
 env-310 AUG
 env-311 AUG
 env-312 AUG
 env-314 AC AUG
 Ami-1-1 UAAAC AUG
 env-315 AUG
 env-317 AUG
 env-318 AUG
 env-319 AUG
 env-320 AUG
 env-321 AUG
 Nni-1-1 AUG
 Nsp-8-1 AUG
 env-322 AUG
 Rsp-20-1 AUG
 Rsp-16-1 AUG
 Mpu-1-1 CGAC AUG
 Msp-27-1 CGAC AUG
 env-323 AUG
 env-324 AUG
 Aal-1-1 AUG
 env-325 AUG
 env-329 AUG
 env-330 CCA AUG
 env-331 CCA AUG
 env-333 AUG
 env-334 AUG
 env-335 AUG
 env-336 C AUG
 env-337 AUG
 env-338 AUG
 Bts-1-1 CC AUG
 Ama-5-1 AUG
 env-339 C AUG
 env-340 AUG
 env-341 AUG
 env-342 AUG
 env-343 AUG
 env-344 AUG
 env-345 AUG
 Mva-1-1 AUG
 Mru-1-1 AUG
 Mva-2-1 AUG
 Mgi-1-1 AUG
 env-346 AUG
 env-347 GGC AUG
 env-348 GCC AUG
 Nas-2-1 AUG
 Mab-65-1 AUG
 env-349 AUG
 env-350 GACUC AUG
 Fsp-7-1 AUG
 Sca-1-1 AUG
 Ssv-1-1 AUG
 Ssp-50-1 AUG
 Ssp-19-1 AUG
 Aro-1-1 AUG
 Sca-2-1 AUG
 Nvi-1-1 AUG
 env-351 C AUG
 env-352 AUG
 env-353 AUG
 env-355 AUG

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env-358 AUG
 env-359 AUG
 env-360 AUG
 env-361 AUG
 env-363 AUG
 env-364 AUG
 env-365 AUG
 Mim-1-1 AUG
 Mab-73-1 AUG
 Mab-55-1 AUG
 Mab-1-114 AUG
 Mma-1-1 AUG
 env-366 AUG
 env-367 GAC..... AUG
 env-368 GAC..... AUG
 env-369 AUG
 Tsp-1-1 UU..... AUG
 Tpa-1-1 GAC..... AUG
 Are-1-1 AAGAC..... AUG
 Nca-3-1 AUG
 env-370 AUG
 env-371 C..... GUG
 Mph-1-1 AUG
 env-372 AUG
 env-373 AUG
 env-374 AUG
 env-377 AUG
 env-378 AUG
 env-379 AUG
 env-380 CC..... AUG
 Sgr-9-1 AUG
 Sex-2-1 AUG
 Ssp-115-1 AUG
 Ssp-105-1 AUG
 Mgl-2-1 C..... AUG
 Sgr-12-2 UUG
 Fsp-14-1 AUG
 Fsa-1-1 AUG
 Gar-2-1 AUG
 Spa-31-1 CGAC..... AUG
 Spa-3-1 CGAC..... AUG
 Spa-39-1 CGAC..... AUG
 Spa-35-1 CGAC..... AUG
 Spa-25-1 CGAC..... AUG
 Nfa-1-1 AUG
 Msp-7-1 AAU
 Msp-19-1 AUG
 Mll-1-1 AUG
 Msp-3-1 AUG
 Msp-20-1 AUG
 Nsp-7-1 AUG
 Nve-1-1 AUG
 Nao-1-1 AUG
 Nce-1-1 AUG
 env-381
 env-382 AUG
 env-384 AUG
 env-386 AUG
 env-390
 Bas-1-1 AUG
 Bas-2-2 AUG
 Bsp-3-1 AUG
 env-391 AUG
 env-394 AUG
 env-396 AUG
 Bsp-2-1 AUG
 Bas-2-3 AUG
 Mma-2-1 AUG
 Msp-2-1 AUG
 env-398 AUG
 Nji-1-1 AUG
 Nno-1-1 AUG
 Nhi-1-1 AUG
 Msp-1-1 AUG
 Msp-18-1 AUG
 Mfo-1-1 AUG
 Mvu-1-1 AUG
 Mse-1-1 AUG
 Msp-23-1 AUG
 Mse-2-1 AUG
 Mse-3-1 AUG
 Mse-3-2 AUG
 Msp-22-1 AUG
 Mne-1-1 AUG

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env-400 ..... AUG
Msp-21-1 ..... AUG
Sal-7-1 C..... AUG
Szi-1-1 C..... AUG
Ssp-17-1 ..... UUG
Ssp-52-1 ..... UUG
Ssp-13-1 ..... UUG
Ssp-66-1 ..... UUG
Ssp-63-1 ..... UUG
Ssp-33-1 ..... UUG
Ssp-117-1 ..... AUG
Swa-1-1 ..... UUG
Ssp-26-1 ..... UUG
Sal-4-1 ..... UUG
Ssp-123-1 ..... AUG
Sgr-2-1 ..... AUG
Sco-3-1 C..... AUG
Ssp-67-1 ..... UUG
Ssp-137-1 ..... UUG
Slu-1-1 ..... AUG
Sga-2-1 ..... AUG
Sau-2-1 ..... AUG
Ssp-21-1 ..... AUG
Nvu-1-1 ..... AUG
Nbr-1-1 ..... AUG
Nte-1-1 ..... AUG
Spr-2-1 ..... AUG
Ssp-106-1 C..... UUG
env-401 ..... UUG
env-402 ..... UUG
Ssp-146-1 ..... UUG
Smi-1-1 ..... AUG
Sda-1-1 ..... AUG
Ssp-161-1 ..... UUG
Ssp-71-1 ..... UUG
Sgr-7-1 ..... UUG
Sgl-3-1 ..... UUG
Ssp-85-1 ..... AUG
Ssp-121-1 ..... AUG
Ssp-104-1 ..... UUG
Ssp-60-1 ..... UUG
Ssp-72-1 C..... AUG
Ssp-99-1 ..... AUG
Ssp-89-1 ..... AUG
Sbi-2-1 ..... UUG
Ssp-82-1 ..... UUG
Ssp-3-1 ..... AUG
Sam-1-1 ..... UUG
Ssp-108-1 ..... UUG
Ssp-48-1 ..... UUG
Ssp-124-1 ..... UUG
Ssp-110-1 ..... UUG
Ssp-140-1 ..... UUG
Ssp-107-1 ..... UUG
Ssp-112-1 ..... UUG
Svi-5-1 ..... AUG
Ssp-74-1 ..... UUG
Sbo-1-1 ..... AUG
env-407 ..... AUG
Ssp-101-1 ..... AUG
Ssp-136-1 ..... UUG
Sto-1-1 C..... AUG
Sch-1-1 ..... AUG
Saf-1-1 ..... UUG
Sva-1-1 ..... AUG
Ssp-154-1 ..... UUG
Sol-1-1 ..... UUG
Ssp-147-1 ..... UUG
Sia-1-1 ..... UUG
Sro-1-1 ..... UUG
Scy-3-1 ..... UUG
Sac-1-1 ..... UUG
Sla-3-1 ..... UUG
Ssp-160-1 ..... UUG
Shy-2-1 ..... UUG
Ssp-125-1 ..... UUG
Spe-1-1 ..... AUG
Ssp-141-1 ..... UUG
Svi-14-1 ..... UUG
Svi-4-1 ..... AUG
env-408 ..... UUG
Sol-2-1 ..... AUG
Kau-1-2 ..... UUG
Svi-12-1 ..... AUG

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Sco-1-1UUG
 Ssp-58-1UUG
 Sno-1-1UUG
 Sgr-1-1UUG
 Sce-1-1UUG
 Ssp-176-1UUG
 Ssp-118-1UUG
 Svi-11-2UUG
 Sgr-12-7UUG
 Ssc-4-1UUG
 Ssp-69-1UUG
 Ssp-153-1UUG
 Sye-2-1UUG
 Sse-1-1UUG
 Sfu-2-1UUG
 Sdu-1-1UUG
 Sip-1-1UUG
 Ssc-3-1UUG
 Ssp-59-1UUG
 Ssp-70-1 C.....UUG
 Ssp-24-1UUG
 Ssp-10-1 C.....UUG
 Ssp-53-1 C.....UUG
 Sni-2-1AUG
 Spr-1-1UUG
 Ssp-134-1UUG
 Sau-1-1UUG
 Asp-7-1UUG
 Sal-5-1UUG
 Svi-2-1UUG
 Stu-1-1 C.....UUG
 Sso-1-1UUG
 Spu-1-1UUG
 Ssp-12-1UUG
 Ssp-78-1UUG
 Ssp-158-1UUG
 Ssp-79-1UUG
 Ssp-92-1UUG
 Ssp-151-1UUG
 Sat-2-1UUG
 Sff-8-1UUG
 Sff-1-1UUG
 Ssp-126-1UUG
 Sgr-11-1UUG
 Ssp-14-1UUG
 Ssp-168-1UUG
 Ssp-49-1 C.....UUG
 Ssp-22-1 C.....UUG
 Ssp-25-1 C.....UUG
 Ssp-152-1UUG
 Ssp-57-1UUG
 Ssp-40-1UUG
 Ssp-6-1 C.....UUG
 Sha-2-1UUG
 Ssp-43-1UUG
 Scy-2-1UUG
 Ssp-39-1UUG
 Sfu-1-1UUG
 Seu-1-1UUG
 Sgr-3-1UUG
 Ssp-9-1UUG
 Ssp-68-1UUG
 Sal-8-2UUG
 San-2-1UUG
 Sod-1-1 C.....UUG
 Ssp-149-1UUG
 Sff-4-1UUG
 Ssp-127-1 C.....UUG
 Ssp-81-1 C.....UUG
 Sat-1-1 C.....UUG
 Ssp-103-1 C.....UUG
 Nsp-3-1UUG
 env-409AUG
 env-410AUG
 env-411UUG
 env-412AUG
 env-413UUG
 env-414UUG
 env-415UUG
 env-416UUG
 env-417GUG
 env-418 GAC.....UUG
 Svi-14-4UUG
 Sve-1-1UUG

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Ssp-38-1UUG
 Sbi-3-1UUU
 Sgl-4-2UUU
 Svi-9-1UUG
 Fsp-2-1UUU
 Fsp-5-1AUG
 Fsp-1-1UUU
 Sgh-1-1UUU
 Ssp-31-1UUG
 Sav-2-1UUU
 Ssp-7-1UUU
 Ssp-44-1UUU
 Sgr-10-1UUU
 Ssp-173-1UUG
 Ssp-16-1UUU
 Ssp-61-1UUG
 Ssp-175-1UUU
 Fsp-6-1UUU
 Fsp-13-1UUU
 Fal-1-1AUG
 Gte-4-1UUU
 Mrh-1-1UUU
 env-419AUG
 env-421 C.....UUU
 env-422 C.....UUU
 env-423 CA.....AUG
 env-424 AAA.....UUU
 env-425 AAA.....UUU
 env-426 AAA.....UUU
 Nsp-11-1UUU
 env-428 C.....GUG
 env-429 GACCA.....UUU
 env-430 GACCAA.....
 env-431UUU
 env-432UUU
 env-433AUG
 env-434UUU
 env-435UUU
 Str-2-1 CGAC.....AUG
 Str-1-1 CGAC.....AUG
 Spa-24-1 CGAC.....AUG
 Spa-32-1 CGAC.....AUG
 Spa-7-1 CGAC.....UUU
 Spa-27-1 CGAC.....AUG
 Spa-5-1 CGAC.....AUG
 Spa-38-1 CGAC.....UUU
 env-436UUU
 Msp-11-1UUU
 env-437 C.....UUU
 env-438UUU
 env-440 U.....UUU
 env-441 CC.....AUG
 env-442 CAC.....AUG
 Gkr-1-1UUU
 env-443UUU
 env-446 C.....GUG
 env-447AUG
 env-448UUU
 env-449
 Mhe-1-1UUU
 Rrh-1-1UUU
 Msp-13-1AUG
 env-450UUU
 Tbi-1-1UUU
 Msp-4-1UUU
 Mav-1-1UUU
 Msp-16-1UUU
 env-452UUU
 Msp-12-1UUU
 Msp-14-1AUG
 Msp-17-1UUU
 env-453UUU
 Mky-1-1UUU
 Sar-43-1 CGAC.....AUG
 Sar-11-1 CGAC.....AUG
 env-454 GACAC.....AUG
 env-455 C.....UUG
 env-456GUG
 Ase-1-1UUU
 Fsp-9-1UUU
 env-457 C.....GUG
 env-459
 env-460
 Spa-33-1 CGAC.....UUU

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Vma-1-1 CGAC AUG
 Gbr-1-1 ACC AUG
 Gna-1-1 CAGAC AUG
 Gal-1-1 AGAU AUG
 Gam-2-1 CAGAC AUG
 Gsp-1-1 AGAC AUG
 Gpa-1-1 GAC AUG
 Gru-1-1 AGAU AUG
 Gam-3-1 AGAC AUG
 Gte-3-1 CAGAC AUG
 Nsp-1-1 GA AUG
 Wsp-1-1 GA AUG
 Kar-2-1 GA AUG
 Gef-1-1 AUC AUG
 env-461 AGACC AUG
 Gpo-3-1 GAG AUG
 Grh-1-1 GAU AUG
 env-462 CC AUG
 Rde-1-1 AUG
 Req-3-1 AUG
 env-463 AUG
 Rfa-3-1 AUG
 Rsp-2-1 AUG
 Rsp-3-1 AUG
 Rfa-12-1 AUG
 Rsp-13-1 AUG
 Rop-1-1 AUG
 Rfa-21-1 AUG
 Rfa-1-2 AUG
 Rfa-4-1 AUG
 Rfa-7-1 AUG
 Rfa-20-1 AUG
 Rfa-8-1 AUG
 Rtr-1-1 AUG
 Rsp-19-1 AUG
 Rsp-21-1 AUG
 Sar-21-1 CGAC AUG
 Sar-40-1 CGAC AUG
 Sar-27-1 CGAC AUG
 Sar-33-1 CGAC AUG
 Sar-26-1 CGAC AUG
 Sar-22-1 CGAC AUG
 Sar-17-1 CGAC AUG
 Sar-24-1 CGAC AUG
 env-474 AUG
 env-475 CAGAC AUG
 Whe-1-1 G AUG
 Spa-28-1 CGAC AUG
 Spa-36-1 CGAC AUG
 Spa-8-1 CGAC AUG
 Dau-1-1 CC AUG
 Mlu-1-1 AUG
 Mch-6-1 AUG
 Mpa-1-1 AUG
 Rsp-9-1 AUG
 Rrh-2-1 AUG
 Rsp-14-1 AUG
 Rsp-5-1 AUG
 Rru-2-1 AUG
 Rru-3-1 AUG
 Rru-1-1 AUG
 Ntr-1-1 AUG
 Not-2-1 AUG
 Not-1-1 AUG
 env-476 GUG
 Msp-26-1 CGAC AUG
 env-477 AC GUG
 env-478 AUG
 env-479 AUG
 Gsp-3-1 AUG
 env-481 AUG
 env-482 AUG
 env-483 AUG
 env-484 CA AUG
 env-485 AUG
 env-486 AC AUG
 Sam-2-1 GAC AUG
 Sro-7-1 GCC AUG
 Sro-3-1 GCC AUG
 Mau-1-1 CGAC AUG
 Msp-9-1 CGAC AUG
 Msp-10-1 CGAC AUG
 Msp-28-1 CGAC AUG
 env-487 AUG

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env-488 UG.....
 Msp-8-1 CGAC.....
 env-489 CCG.....
 env-490
 Nco-1-1
 env-494 AA.....
 Mca-1-1 CGAC.....
 env-495 UA.....AUG
 env-496 CC.....
 env-497
 env-498 A.....GUG
 env-499 A.....GUG
 env-500 A.....
 env-501 A.....
 env-502
 env-503 A.....
 env-505 A.....
 env-506 A.....
 env-508 A.....
 env-509
 env-510 A.....
 env-513 AAA.....
 env-514 GAA.....
 env-515 CC.....
 Nca-2-1
 Asu-1-1
 env-516 CC.....
 env-517 CC.....
 env-518 CA.....
 env-520GUG
 env-521 CAA.....GUG
 env-522 AC.....
 env-523 GACUC.....
 env-524 CA.....
 env-526 A.....
 env-527 AU.....AUG
 env-530 AU.....
 env-531 AU.....
 env-532
 env-533 AC.....
 env-534
 env-535 A.....UGA
 env-536 A.....UUG
 env-538 AC.....AUG
 Sna-1-1
 env-539 CA.....
 env-540 AC.....
 env-541 ACA.....
 env-542 ACA.....GUG
 env-543 ACA.....GUG
 env-544 ACA.....
 env-546 A.....
 env-547 A.....AUG
 env-548 C.....AUG
 env-549 AC.....
 env-551 AC.....AUG
 env-552 CC.....
 env-553 U.....
 env-555
 env-557 AC.....
 env-558 AC.....
 env-560 AC.....
 env-561AUG
 env-563
 env-564
 env-565 AC.....
 env-568 AC.....
 env-570 AU.....
 env-571
 env-572 CC.....AUG
 env-573 CC.....
 env-576 C.....AUG
 env-577 CGUU.....
 env-578 A.....AUG
 env-579 AC.....AUG
 env-582 AC.....
 env-583 AC.....AUG
 env-584 AC.....AUG
 env-585 AC.....
 env-586 AC.....AUG
 env-587
 env-588
 env-589 AACAG.....
 env-591 AAGAA.....

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env-592 CAGCA . . . AUG
 env-593 C AUG
 env-594 ACAC AUG
 env-596 ACAC AUG
 env-597 ACAC AUG
 env-598 C AUG
 env-600 CCA AUG
 Nbr-4-1 AUG
 Npa-1-1 AUG
 env-601 C AUG
 env-602 AUG
 Gam-1-1 AUG
 Gso-1-1 AUG
 Gsh-1-1 AUG
 Nsp-5-1 AUG
 env-603 GACUC AUG
 Ari-2-1 C AUG
 env-604 AUG
 env-605 AUG
 env-606 AUG
 env-607 AUG
 env-608 U AUG
 Ata-1-1 AUG
 Aha-1-1 AUG
 env-609 U GUG
 env-610 AUG
 env-611 AUG
 env-629 U AUG
 Pau-1-1 C AUG
 Psp-6-1 CC AUG
 Ses-1-1 CG AUG
 Ksp-2-1 AC AUG
 Sgl-1-1 AUG
 env-630 AUG
 Aba-1-1 AUG
 Ari-1-1 AUG
 Ava-2-1 AUG
 Aal-2-1 AUG
 env-631 GUG
 env-633 GUG
 env-637 GUG
 Lae-1-1 UC AUG
 env-638 U AUG
 env-639 U AUG
 Aen-1-1 ACCAGUUC . . . AUG
 Aha-3-1 AUG
 env-647 AUG
 env-648 AUG
 Ksp-1-1 A AUG
 Lal-2-1 UC AUG
 Lae-1-2 UC AUG
 env-649 CU GUG
 Psp-9-1 C AUG
 Aje-1-1 AUG
 Iir-1-1 AUG
 Ain-1-1 C AUG
 Aja-1-1 AUG
 Asp-6-1 AUG
 Aaz-1-1 AUG
 Aor-4-1 AUG
 Ssp-91-1 AUG
 Abe-1-1 AUG
 Aor-1-1 AUG
 Aor-3-1 AUG
 Ade-1-1 AUG
 Ssp-5-1 AUG
 Aor-2-1 AUG
 env-650 AUG
 env-651 GUG
 env-652 AUG
 Sha-1-1 AUG
 Spa-41-1 AUG
 Kal-2-1 G UUG
 Saz-1-1 AUG
 Svi-1-1 AUG
 Ssp-45-1 AUG
 Kar-1-1 A AUG
 Ami-1-1 AUG
 Rrh-3-1 A AUG
 Scy-1-1 AUG
 env-653 C GUG
 Ame-3-1 AUG
 Ssp-46-1 CG AUG
 Ami-2-1 G AUG

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Ssp-1-1      G.....UUU
env-654      .....UUU
env-656      .....UUU
Sts-1-1      .....UUU
env-657      AGAUC....UUU
Rsp-11-1     .....AUG
env-658      .....AUG
Rsp-12-1     .....AUG
Rrh-4-1      .....UUU
Ace-1-1      G.....UUU
Gja-1-1      GA.....UUU
Gsp-2-1      GA.....UUU
Got-1-1      GA.....UUU
Gai-1-1      GAG.....UUU
Asp-5-2      C.....UUU
env-663      .....AUG
Sma-1-1      .....UUU
env-664      C.....UUU
Ssu-1-1      .....UUU
Ssu-2-1      .....UUG
Sje-1-1      C.....UUU
Sal-2-1      C.....UUG
Sru-1-1      C.....UUU
Ssp-100-1    .....UUU
Ssp-129-1    .....UUG
Ssp-171-1    .....UUU
Ssp-170-1    C.....UUU
Ssp-56-1     .....UUU
Kaz-1-1      C.....UUU
Svi-7-1      .....UUU
Smo-1-1      .....UUU
Ama-4-1      .....UUU
env-666      .....UUU
Bsc-2-1      CC.....AUG
Ssc-1-1      .....UUU
Sle-1-1      .....UUG
Scl-1-1      .....UUU
Sre-3-1      .....UUG
Ser-2-1      G.....UUG
Ssp-20-1     .....UUG
Sst-1-1      .....UUU
Mne-3-1      .....AUG
.....
-----RUG

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10 L31-Coriobacteria

10.1 Taxa

The taxonomy of each organism containing a putative L31-Coriobacteria RNA will be used to identify each individual L31-Coriobacteria RNA in Sections 10.2 is listed, with abbreviations identifying each hit (e.g., “Eco-1-1” and “Eco-1-2” and 10.4: might hypothetically represent two distinct RNAs in *E. coli*). The abbreviations

abbrev. of hits	taxonomy of species
Aeq-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Adlercreutzia equolifaciens</i> DSM 19450
Ami-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Atopobium minutum</i> 10063974
Apa-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Atopobium parvulum</i> DSM 20469
Ari-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Atopobium rimae</i> ATCC 49626
Asp-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Atopobium sp. BV3Ac4</i>
Asp-2-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Atopobium sp. oral taxon 199 str. F0494</i>
Asp-3-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Atopobium sp. oral taxon 810 str. F0209</i>
Ava-1-1 to Ava-1-2	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Atopobium vaginae</i> DSM 15829
Cae-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Collinsella aerofaciens</i> ATCC 25986
Cin-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Collinsella intestinalis</i> DSM 13280
Csp-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Collinsella sp. GD3</i>
Cst-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Collinsella stercoris</i> DSM 13279
Cta-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Collinsella tanakaei</i> YIT 12063
Cba-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae <i>Coriobacterium BV3Ac1</i>

Cba-2-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>bacterium</i> GD5
Cgl-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Coriobacterium glomerans</i> PW2
Ele-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Eggerthella lenta</i> DSM 2243
Esp-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Eggerthella sp.</i> 1.3.56FAA
Esp-2-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Eggerthella sp.</i> HGA1
Esp-3-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Eggerthella sp.</i> YY7918
Eca-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Enterorhabdus caecimuris</i> B7
Gpa-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Gordonibacter pamelaecae</i> 7-10-1-b
Opr-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Olsenella profusa</i> F0195
Osp-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Olsenella sp. oral taxon</i> 809 str. F0356
Oul-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Olsenella uli</i> DSM 7084
Sex-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Slackia exigua</i> ATCC 700122
She-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Slackia heliotrinireducens</i> DSM 20476
Spi-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Slackia piriformis</i> YIT 12062
Ssp-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Coriobacterineae Coriobacteriaceae	<i>Slackia sp.</i> CM382
Afo-1-1	Bacteria Actinobacteria Coriobacteridae Coriobacteriales Atopobiaceae	<i>Atopobium fossor</i> DSM 15642
Apa-2-1	Bacteria Actinobacteria Coriobacteriia Coriobacteriales Atopobiaceae	<i>Atopobium parvulum</i> DNF00906
Asp-4-1	Bacteria Actinobacteria Coriobacteriia Coriobacteriales Atopobiaceae	<i>Atopobium sp.</i> BS2
Asp-5-1	Bacteria Actinobacteria Coriobacteriia Coriobacteriales Atopobiaceae	<i>Atopobium sp.</i> ICM42b
Ava-2-1	Bacteria Actinobacteria Coriobacteriia Coriobacteriales Atopobiaceae	<i>Atopobium vaginae</i>
Oul-2-1	Bacteria Actinobacteria Coriobacteriia Coriobacteriales Atopobiaceae	<i>Olsenella uli</i> MSTE5
Csp-2-1	Bacteria Actinobacteria Coriobacteriia Coriobacteriales Coriobacteriaceae	<i>Collinsella sp.</i> 4.8.47FAA
Csp-3-1	Bacteria Actinobacteria Coriobacteriia Coriobacteriales Coriobacteriaceae	<i>Collinsella sp.</i> MS5
Cba-3-1	Bacteria Actinobacteria Coriobacteriia Coriobacteriales Coriobacteriaceae	<i>bacterium</i> 68-1-3
Ema-1-1	Bacteria Actinobacteria Coriobacteriia Coriobacteriales Coriobacteriaceae	<i>Enorma massiliensis phi</i>
San-1-1	Bacteria Actinobacteria Coriobacteriia Coriobacteriales Coriobacteriaceae	<i>Senegalimassilia anaerobia</i> JC110
Ele-2-1 to Ele-2-2	Bacteria Actinobacteria Coriobacteriia Eggerthellales Eggerthellaceae	<i>Eggerthella lenta</i> 1-1.60AFAA
Emu-1-1	Bacteria Actinobacteria Coriobacteriia Eggerthellales Eggerthellaceae	<i>Enterorhabdus mucosicola</i> DSM 19490
env-1 to env-259	environmental samples	

10.2 Gene contexts

Each L31-Coriobacteria RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one L31-Coriobacteria RNA are assigned a color; other domains are gray. Information about these con-

served domains is given in Section 10.3. The accession of the sequence containing each L31-Coriobacteria RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each L31-Coriobacteria RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 10.1.

abbrev.	Seq. accession	5′ at	3′ at	genes
env-1	JGI24735.J21928.10303163	+	78	111 RNA→ rpmE (PRK00528)Ribosomal_L31 (pfam01197)→ RimL (COG1670)Acetyltransf.3 (pfam13302)→
env-2	AUXO017004512.1	-	117	84 RNA→ rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-3	AUXO016339607.1	-	94	61 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-4	SRS011111_Baylor_scaffold.9512	+	2842	2874 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-5	SRS023468_LANL_scaffold.7759	+	6315	6347 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-6	SRS023604_Baylor_scaffold.10029	-	18845	18813 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-7	LWSO2_GGWJX9X02HB8PF	+	220	250 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-8	4448818.3_Contig28460	-	132	94 RNA→ ←-hypo
env-9	4448807.3_Contig19481	-	164	127 RNA→ rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-10	4448811.3_Contig15515	-	234	197 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-11	4448816.3_Contig24142	-	467	430 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-12	4448820.3.Contig_6849	-	894	857	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-13	DLM013.scaffold31757_3	-	262	225	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Cta-1-1	NZ_JH126470.1	+	134255	134292	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-14	HCF12C.23335	+	238	272	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-15	AUXO018093914.1	+	291	328	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-16	4448811.3.Contig11262	+	140	176	RNA→	←-hypo
env-17	hgutS7_s7_164738	-	1067	1032	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-18	hgutS7_s7_179880_2	-	652	617	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-19	scaffold83292_1.MH0041	-	442	407	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-20	scaffold8232_5.MH0062	-	1352	1317	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-21	C6781021_1.MH0069	-	404	369	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-22	scaffold58836_1.MH0085	+	477	512	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-23	scaffold18205_4.MH0086	-	1313	1278	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-24	scaffold27957_2.O2.UC-11	-	244	209	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-25	scaffold61969_3.V1.CD-8	-	314	279	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-26	scaffold3383_12.V1.UC-15	-	531	496	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-27	scaffold9272_17.V1.UC-19	-	1817	1782	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-28	SRS049164_WUGC.scaffold_57754	-	167	132	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-29	DLF009.scaffold14997_4	+	7628	7663	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-30	DLM001.scaffold25088_28	+	399	434	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-31	DLM013.scaffold384_15	+	9046	9081	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-32	DLM019.scaffold37572_5	-	1768	1733	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-33	longitudinal_63_388	+	48143	48178	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-34	longitudinal_64_137	+	48145	48180	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-35	longitudinal_65_38	-	57705	57670	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-36	longitudinal_280_54	+	6079	6114	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-37	longitudinal_281_174	-	8873	8838	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-38	longitudinal_282_53	+	9862	9897	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-39	longitudinal_283_45	+	6079	6114	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-40	longitudinal_284_41	+	6076	6111	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-41	longitudinal_285_12	-	8873	8838	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-42	longitudinal_343_62	+	6079	6114	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-43	longitudinal_381_116	-	99840	99805	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-44	longitudinal_420_41	-	61707	61672	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-45	AUXO018332126.1	+	54	89	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-46	ADJT01003987.1	+	3155	3190	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-47	SRS012273_C3752464	+	1348	1383	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-48	SRS013687_Baylor.scaffold_51084	+	2102	2137	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-49	SRS013951_C2593644	-	285	250	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-50	SRS014683_C1571330	+	245	280	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-51	SRS015217_C2166290	+	152	187	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-52	SRS015782_C3168068	+	130	165	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-53	SRS017103_C2711990	-	528	493	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-54	SRS018351_C2783037	+	825	860	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-55	SRS019030_C1583151	-	162	127	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-56	SRS020233_C3826123	-	273	238	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-57	SRS020328_Baylor.scaffold_38533	+	5089	5124	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-58	SRS020869_C3184531	+	109	144	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-59	SRS022071_C3051314	+	1344	1379	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-60	SRS023526_C3010627	-	178	143	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-61	SRS023914_C2026054	+	315	350	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-62	SRS047014_C3267765	-	281	246	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-63	SRS050422_LANL_scaffold_39298	-	288	253	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Cae-1-1	NZ_AAVN02000005.1	+	56643	56678	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ h
Csp-2-1	NZ_KN214135.1	-	212670	212635	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-64	BABA01020564.1	-	774	739	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-65	4491422.3_NODE_1607	-	337	302	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-66	longitudinal_286_70	-	8161	8126	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-67	longitudinal_287_87	-	11143	11108	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-68	longitudinal_288_88	-	3650	3615	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-69	longitudinal_289_88	-	8161	8126	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-70	longitudinal_290_101	+	12604	12639	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-71	longitudinal_338_112	-	8161	8126	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-72	longitudinal_339_157	+	12969	13004	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-73	longitudinal_340_81	-	3439	3404	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-74	longitudinal_341_75	+	12952	12987	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-75	longitudinal_342_144	+	12957	12992	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-76	SRS014235_WUGC_scaffold_14702	+	1430	1465	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-77	SRS014979_C3174944	-	413	378	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-78	SRS017521_Baylor_scaffold_30477	+	4003	4038	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-79	SRS065504_C3275369	-	421	386	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Opr-1-1	NZ_AWEZ01000030.1	-	64182	64151	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ema-1-1	NZ_HE978575.1	+	590068	590102	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Cba-2-1	NZ_CAPF01000059.1	-	2507	2473	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Csp-1-1	NZ_CAPI01000012.1	+	2962	2996	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Oul-1-1	NC_014363.1	+	119036	119067	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Oul-2-1	NZ_JANC01000012.1	-	45561	45530	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-80	AUXO010118135.1	+	576	609	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-81	2204694758	+	334	365	RNA→	
Cgl-1-1	NC_015389.1	+	824421	824455	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-82	SRS049268_C4052608	-	112	80	RNA→	hypo→
Ari-1-1	NZ_ACFE01000002.1	+	328239	328271	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Asp-2-1	NZ_KE150486.1	-	1050194	1050162	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-83	SRS011086_C2736760	-	326	294	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-84	SRS017076_Baylor_scaffold_23156	+	449	481	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-85	SRS075404_C3618531	+	64	96	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-86	SRS013818_C2768522	+	223	255	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-87	SRS014271_C2867060	-	517	485	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-88	SRS015209_WUGC_scaffold_51435	+	5240	5272	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-89	SRS015272_C3481572	+	65	97	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-90	SRS015395_C2406090	+	1317	1349	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-91	SRS015537_C1264717	+	921	953	RNA→	
env-92	SRS016501_C1505461	-	140	108	RNA→	hypo→
env-93	SRS016569_Baylor_scaffold_22226	-	109	77	RNA→	
env-94	SRS016569_C2401739	+	329	361	RNA→	
env-95	SRS018739_C3648710	-	753	721	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-96	SRS020856_C2570764	+	315	347	RNA→	←hypo
env-97	SRS022143_WUGC_scaffold_36034	+	110	142	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-98	SRS023835_Baylor_scaffold_50858	-	904	872	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-99	SRS024015_Baylor_scaffold_31148	+	637	669	RNA→	←hypo
env-100	SRS024277_C2768622	-	400	368	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-101	SRS042131_WUGC_scaffold_2856	+	6	38	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-102	SRS042643_WUGC_scaffold_10098	+	423	455	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ AAA (smart00382)AAA (cd00009)→
env-103	SRS047210_WUGC_scaffold_60400	+	673	705	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-104	SRS047219.WUGC_scaffold_9164	+	1127	1159	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-105	SRS047824.WUGC_scaffold_52711	-	887	855	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-106	SRS049147.C4119585	+	6	38	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-107	SRS049389.C4562091	-	221	189	RNA→	←hypo
env-108	SRS056323.LANL_scaffold_14744	+	220	252	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-109	SRS056622.LANL_scaffold_16043	-	1899	1867	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-110	SRS057791.C3637891	+	69	101	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-111	SRS062540.C2336651	-	952	920	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-112	SRS062544.LANL_scaffold_33267	+	527	559	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-113	SRS077736.C1828913	-	488	456	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Apa-1-1	NC_013203.1	+	128868	128900	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Asp-4-1	NZ_JDFG01000048.1	+	63761	63793	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Asp-5-1	NZ_JDFH01000035.1	+	5736	5768	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-114	SRS021496.Baylor_scaffold_7910	-	3781	3749	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-115	SRS011140.C4988252	+	126	158	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-116	Buccal_mucosa_LANL_C65146548	-	471	439	RNA→	hypo→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-117	SRS016740.Baylor_scaffold_9629	+	219	251	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-118	SRS017076.C2662728	+	253	285	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-119	SRS064329.C2589301	+	141	173	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-120	Tongue_dor.WUGI_scaffold_55993	-	447	415	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-121	SRS012279.Baylor_scaffold_57650	-	899	867	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-122	SRS013234.C2966946	-	305	273	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-123	SRS013705.C3713865	-	413	381	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-124	SRS014124.WUGC_scaffold_11711	-	938	906	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-125	SRS014470.WUGC_scaffold_24370	-	840	808	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-126	SRS014573.C3542830	-	341	309	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-127	SRS014689.C1283327	-	400	368	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-128	SRS015038.C1928591	+	27	59	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-129	SRS015055.C1676308	-	723	691	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-130	SRS015057.WUGC_scaffold_9742	-	825	793	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-131	SRS015434.C5898733	+	82	114	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-132	SRS015537.WUGC_scaffold_19165	-	44	12	RNA→	
env-133	SRS015644.WUGC_scaffold_49316	-	942	910	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-134	SRS015762.C3578704	-	639	607	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-135	SRS015941.WUGC_scaffold_59228	-	663	631	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-136	SRS016002.C2556868	+	244	276	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-137	SRS016086.C2442888	+	67	99	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-138	SRS016319.WUGC_scaffold_11364	+	212	244	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-139	SRS016342.Baylor_scaffold_20579	+	525	557	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-140	SRS017120.C2921280	-	413	381	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-141	SRS017439.C3698549	+	202	234	RNA→	
env-142	SRS017713.C3305279	+	126	158	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-143	SRS017808.Baylor_scaffold_44287	+	230	262	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-144	SRS018591.WUGC_scaffold_42629	+	65	97	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-145	SRS018791.WUGC_scaffold_2836	-	1590	1558	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-146	SRS018969.WUGC_scaffold_53133	+	372	404	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-147	SRS019022.WUGC_scaffold_39687	+	232	264	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-148	SRS019045.WUGC_scaffold_40812	-	851	819	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-149	SRS019071.C5034475	-	400	368	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-150	SRS019122.C5873801	-	732	700	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-151	SRS019126.C2212554	-	968	936	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-152	SRS019389.C2194616	-	65	33	RNA→	←hypo

env-153	SRS019607_WUGC_scaffold_12800	+	225	257	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-154	SRS019894_WUGC_scaffold_47801	-	658	626	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-155	SRS020220_Baylor_scaffold_50196	+	6	38	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-156	SRS020334_Baylor_scaffold_19799	+	232	264	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-157	SRS021954_Baylor_scaffold_39267	+	219	251	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-158	SRS022077_Baylor_scaffold_32981	-	527	495	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-159	SRS022621_C4071744	+	67	99	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-160	SRS023352_LANL_scaffold_13686	+	219	251	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-161	SRS023557_C1683448	-	223	191	RNA→	←hypo
env-162	SRS023926_Baylor_scaffold_72447	-	407	375	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-163	SRS024015_C2963407	-	44	12	RNA→	
env-164	SRS024081_C2590902	+	126	158	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-165	SRS024138_C2654625	+	123	155	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-166	SRS024318_C3676033	+	65	97	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-167	SRS024375_C2434347	-	486	454	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-168	SRS024580_C3075706	-	295	263	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-169	SRS042910_C5601812	-	747	715	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-170	SRS044373_WUGC_scaffold_65551	-	486	518	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-171	SRS045715_C4791115	+	108	140	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-172	SRS048791_C3164330	+	64	96	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-173	SRS050244_LANL_scaffold_45098	-	963	931	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-174	SRS051791_C1722574	+	65	97	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-175	SRS053854_C1994549	+	108	140	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-176	SRS055426_C3209603	+	265	297	RNA→	
env-177	SRS057205_C3503245	+	65	97	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-178	SRS057355_C2264004	+	154	186	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-179	SRS057539_LANL_scaffold_40891	+	200	232	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-180	SRS058336_C2156394	+	459	491	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-181	SRS062761_C4283446	+	402	434	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-182	SRS063193_C2860763	+	152	184	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-183	SRS064423_LANL_scaffold_34929	+	253	285	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-184	SRS064774_LANL_scaffold_58893	-	1834	1802	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-185	SRS065278_LANL_scaffold_41028	+	438	470	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Apa-2-1	NZ_JRND01000030.1	+	5302	5334	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ami-1-1	NZ_KB822533.1	+	353125	353157	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Asp-1-1	NZ_AWUQ01000004.1	-	226500	226468	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→ COG4932 (COG4932)SdrD_B (pfam17210)
Afo-1-1	NZ_AXXR01000003.1	-	295118	295086	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-186	SRS023468_C1197102	+	689	721	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-187	SRS013542_C162841	-	662	630	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-188	SRS017497_Baylor_scaffold_221	-	4581	4549	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ava-2-1	NZ_LFWE01000006.1	-	17065	17033	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ava-1-1	NZ_ADNA01000024.1	-	342	310	RNA→	hypo→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)
Ava-1-2	NZ_ACGK02000004.1	-	17226	17194	RNA→	←hypo
env-189	AUXO010832507.1	-	84	52	RNA→	
env-190	AUXO013415356.1	+	198	230	RNA→	
Csp-3-1	NZ_CDJG01000012.1	-	162765	162730	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-191	4448817.3.Contig32874	-	129	92	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-192	UnmappedStool_Broad_C253114623	-	177	145	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-193	SRS012273_C3491547	-	170	138	RNA→	
env-194	SRS014923_WUGC_scaffold_45412	+	37736	37768	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-195	SRS015782_C3338422	-	62	30	RNA→	
Cba-3-1	NZ_CP009302.1	+	539611	539643	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-196	longitudinal_131_L1	+	94369	94405	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-197	longitudinal_132_108	+	94370	94406	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Cin-1-1	NZ_GG692710.1	-	781470	781434	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-198	C5333626_1_V1.UC-13	-	179	143	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-199	4448808.3_Contig27735	+	205	241	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Cst-1-1	NZ_DS995474.1	+	655651	655687	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-200	4448815.3_Contig8776	+	771	807	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-201	hgutS7_s7_160723	+	1179	1211	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-202	scaffold16601_1_MH0086	+	702	731	RNA→	rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-203	scaffold88090_1_V1.UC-8	-	230	201	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-204	scaffold14720_2_V1.UC-9	+	1271	1300	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-205	UnmappedStool_Broad_C252282338	+	322	351	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Aeq-1-1	NC_022567.1	-	1728457	1728428	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eca-1-1	NZ_KE159646.1	-	1050872	1050842	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Emu-1-1	NZ_AUGK01000020.1	+	30651	30681	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-206	scaffold28919_2_O2.UC-11	-	258	226	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Esp-3-1	NC_015738.1	+	1175139	1175171	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-207	UnmappedStool_Broad_C251071986	-	178	143	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-208	SRS013687_C2417546	+	245	280	RNA→	
Gpa-1-1	NC_021021.1	-	3191605	3191573	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-209	HCF14C_9070	+	2040	2073	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-210	HCF12C_364780	+	265	298	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-211	DLF014_scaffold10759_1	+	16339	16371	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-212	SRS014923_C3176260	+	293	325	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-213	scaffold261738_2_MH0006	-	448	417	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-214	scaffold603_48_V1.UC-9	-	384	353	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-215	4491403.3_NODE_18899	+	21	52	RNA→	←hypo
env-216	scaffold77902_2_O2.UC-20	-	409	378	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-217	4491421.3_NODE_60554	-	777	746	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-218	scaffold30007_3_V1.UC-13	+	2845	2876	RNA→	←hypo
env-219	DLM013_scaffold15861_2	+	869	900	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-220	4491482.3_NODE_97544	-	175288	175256	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-221	4448814.3_Contig25164	-	206	176	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sex-1-1	NZ_GG700631.1	-	393259	393228	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ssp-1-1	NZ_ALNO01000001.1	-	333235	333204	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Spi-1-1	NZ_JH815198.1	+	276110	276143	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-222	AUXO012801284.1	-	272	242	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
She-1-1	NC_013165.1	+	551648	551679	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-223	AUXO013603529.1	-	63	33	RNA→	hypo→
env-224	AUXO015651590.1	-	285	255	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-225	UnmappedStool_Broad_scaffold_663971	-	151	120	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-226	longitudinal_468_349	+	53949	53980	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-227	longitudinal_469_265	+	204513	204544	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-228	longitudinal_470_162	+	204460	204491	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-229	longitudinal_471_135	+	204422	204453	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-230	longitudinal_472_50	+	103193	103224	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-231	longitudinal_473_767	+	27039	27070	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-232	longitudinal_474_318	-	36846	36815	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-233	longitudinal_475_209	-	8208	8177	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ele-1-1	NC_013204.1	+	1346970	1347001	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Esp-2-1	NZ_AEXR01000022.1	-	17235	17204	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Esp-1-1	NZ_GL622579.1	-	777790	777759	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

Ele-2-1	NZ_KN214095.1	-	32073	32042	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-234	DLF009_scaffold20110.2	+	444	475	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-235	AUXO017671678.1	-	38	8	RNA →
env-236	AUXO015549318.1	+	182	212	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-237	AUXO011881503.1	-	224	194	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
San-1-1	NZ_HE611014.1	+	742774	742807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-238	AUXO018607472.1	-	131	98	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-239	AUXO012093637.1	+	87	120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-240	4448808.3_Contig1066	+	3701	3732	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo →
env-241	4448811.3_Contig16884	-	73	42	RNA → ← hypo
env-242	4448813.3_Contig3373	+	962	993	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-243	4448814.3_Contig31153	-	302	271	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-244	4448816.3_Contig28865	-	364	333	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-245	AUXO017402315.1	-	978	947	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Cba-1-1	NZ_AWUP01000003.1	+	66691	66722	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Asp-3-1	NZ_KE952956.1	+	5823	5854	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-246	2158020257	+	333	364	RNA → ← hypo
Osp-1-1	NZ_JH376563.1	-	464047	464016	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-247	AUXO013076199.1	+	598	629	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-248	JGI20225J20221_1001165	+	34179	34210	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-249	JGI2065J20421_1004925	+	1069	1100	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-250	SRS024561_C2821916	+	707	738	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-251	SRS018443_Baylor_scaffold_60373	-	2651	2620	RNA → rpmE (PRK00019) rpsP (PRK14521) Ribosomal_L31 (pfam01197) →
env-252	Supragingival_plaque_LANL_scaffold_407597	-	335	304	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-253	SRS013836_C4767505	+	351	382	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-254	SRS047634_C4113595	+	242	273	RNA →
env-255	SRS058808_LANL_scaffold_72397	-	425	394	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-256	HCF12C_292540	-	428	397	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-257	HCF14C_2.1.1_newblercontig36662	+	561	592	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-258	HCF12C_352730	+	46	77	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-259	HCF12C_263188	-	719	688	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ele-2-2	NZ_KN214097.1	+	94244	94275	RNA → ← Transposase_20 (pfam02371)

10.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 10.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one L31-

Coriobacteria RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 10.2.

cd00009 (1) The AAA+ (ATPases Associated with a wide variety of cellular Activities) superfamily represents an ancient group of ATPases belonging to the ASCE (for additional strand, catalytic E) division of the P-loop NTPase fold.

COG1670 (1) Protein N-acetyltransferase, RimJ/RimL family [Translation, ribosomal structure and biogenesis, Posttranslational modification, protein turnover, chaperones]

COG4932 (1) Uncharacterized surface anchored protein [Function unknown]

pfam01197 (277) Ribosomal protein L31.

pfam02371 (1) Transposase IS116/IS110/IS902 family.

pfam13302 (1) Acetyltransferase (GNAT) domain.

pfam17210 (1) SdrD B-like domain.

PRK00019 (276) 50S ribosomal protein L31; Reviewed

PRK00528 (1) 50S ribosomal protein L31; Reviewed

PRK01678 (3) 50S ribosomal protein L31 type B; Reviewed

PRK14521 (1) 30S ribosomal protein S16; Provisional

smart00382 (1) ATPases associated with a variety of cellular activities.

10.4 Multiple-sequence alignment

Each L31-Coriobacteria RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 10.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The L31-Coriobacteria RNA itself is denoted by the line underneath marked 5′ and 3′ on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded green. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-Crick or G-U

pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, red nucleotides: nucleotide identity conserved more than 97% of the time, black nucleotides: 90%, gray nucleotides: 75%, red circle (◉): nucleotide is present 97% of the time, black circle (◐): 90%, gray circle (◑): 75%, white circle (○): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Aeq-1-1, Apa-1-1, Apa-2-1, Ari-1-1, Asp-1-1, Asp-2-1, Asp-4-1, Asp-5-1, Ava-1-1, Ava-1-2, Ava-2-1, Cae-1-1, Cin-1-1, Csp-1-1, Csp-2-1, Cst-1-1, Cta-1-1, Ele-1-1, Ele-2-1, Esp-1-1, Esp-2-1, Oul-2-1, Ssp-1-1, env-10, env-100, env-101, env-102, env-103, env-104, env-105, env-106, env-107, env-108, env-109, env-11, env-110, env-111, env-112, env-113, env-117, env-118, env-119, env-12, env-120, env-121, env-122, env-123, env-124, env-125, env-126, env-127, env-128, env-129, env-13, env-130, env-131, env-132, env-133, env-134, env-135, env-136, env-137, env-138, env-139, env-140, env-141, env-142, env-143, env-144, env-145, env-146, env-147, env-148, env-149, env-150, env-151, env-152, env-153, env-154, env-155, env-156, env-157, env-158, env-159, env-160, env-161, env-162, env-163, env-164, env-165, env-166, env-167, env-168, env-169, env-170, env-171, env-172, env-173, env-174, env-175, env-176, env-177, env-178, env-179, env-18, env-180, env-181, env-182, env-183, env-184, env-185, env-187, env-188, env-19, env-193, env-194, env-195, env-197, env-199, env-20, env-203, env-204, env-205, env-208, env-21, env-210, env-215, env-219, env-22, env-226, env-227, env-228, env-229, env-23, env-230, env-231, env-232, env-233, env-239, env-24, env-241, env-242, env-243, env-244, env-245, env-249, env-25, env-252, env-253, env-254, env-255, env-258, env-26, env-27, env-28, env-29, env-30, env-31, env-32, env-33, env-34, env-35, env-36, env-37, env-38, env-39, env-40, env-41, env-42, env-43, env-44, env-45, env-46, env-47, env-48, env-49, env-5, env-50, env-51, env-52, env-53, env-54, env-55, env-56, env-57, env-58, env-59, env-6, env-60, env-61, env-62, env-63, env-65, env-66, env-67, env-68, env-69, env-70, env-71, env-72, env-73, env-74, env-75, env-76, env-77, env-78, env-79, env-84, env-85, env-86, env-87, env-88, env-89, env-90, env-91, env-92, env-93, env-94, env-95, env-96, env-97, env-98, env-99

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alignment positions 1...52
env-1 CC.GCUGGUCGGAAACC.AGGGG...CUAACCCAAGGAA..AACACACUUU
env-2 GU.UCUGGUCGGUAAACC.AGAAC...ACUUGCGAAGGAG...ACCAACUUU
env-3 AC.GAUGGUCGGAAACC.AUCCG...CCGAAAGAGAGGAG...AUUAAACAUG
env-4 GG.CUUGGUCGGAAACC.AAGCC...UCGAUAAAGGAG...ACUAUUUU
env-7 GG.CCUGGUCGGAAACC.AGGCC...ACCUAUGGAGGUUAUGAACAUUU
env-8 GU.UCUGGUCGGUAAACCUAGAACGCCAGUAAUUAAGAGGAG...CCCGCCCAUG
env-9 GU.UCUGGUCGGUAAACC.AGAACGCCAGUAAUUAAGAGGAG...CCCGCCCAUG
env-14 GC.UCUGGUCGGAAACC.AGGGC...GCGACAAAGAGGAG..UGUUACACUUU
env-15 GC.ACUGGUCGGAAACC.AGUGC...GCGUUCUUAUGAAGGAG..UCUUGCCUUU
env-16 GC.GCUGAUCGGUAAACC.AGGCC...CUGACUAAUUAAGGAG..UCCUACCAUG
env-17 GC.GCUGAUCGGUAAACC.AGGCC...CUGACUAAUUAAGGAG..UCCUACCAUG
env-64 CG.CCUGGUCGGAAACC.AGGCC...CAAUGAAGGAGCCUGAACUUU
Ema-1-1 GC.CCUGGUCGGUAAACC.AGGAC...GAGAUCGUUAGGAG..UCCUGCUUUU
Cba-2-1 GU.CCUGGUCGGUAAACC.AGGAC...GCGAUGGUUAGGAG..UCCUGCAUG
Oul-1-1 GG.UCUGGUCGGAAACC.AGA.C...AGGCAGAAGGAG..UCCCGACUUU
env-80 GC.CUUGAUCGGAAACC.AGGC...ACAGAAAGAGGAGAGUUCAGCUUU
env-81 GC.CUGGUCGGAAACC..AGGC...CAAACGAAGGAG..UCCUGAAAUU

<<.<<<<<<.....>>>>>>.....
#2.222101.....101.2222.....
5'-YUGGUCGGAACC-AR-C---o-o-o-o-RAAGGAG--o-1-••••AUG
5

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Cgl-1-1 GC UCUGGUCGAAAACC. AGAGC. . . . .ACGAUCACAAGGAG. . .CCCUUGU
env-82 GC UCUGGUCGAAAACC. AGAGC. . . . .CGAUGUAAGGAG. . .UCCUGUAUG
env-83 GC UCUGGUCGAAAACC. AGAGC. . . . .CGAUGUAAGGAG. . .UCCUGC
env-114 GC UCUGGUCGAAAACC. AGGGC. . . . .CGAUGUAAGGAG. . .UUCUGCAUG
env-115 GC UCUGGUCGAAAACC. AGGGC. . . . .CGAUGUAAGGAG. . .UCCGCG
env-116 GC UCUGGUCGAAAACC. AGGGC. . . . .CGAUGUAAGGAG. . .UCCUGC
Ami-1-1 GC UCUGGUCGAAAACC. AGAGC. . . . .CGUUAGAAGGAG. . .UUUUAU
Afo-1-1 GC UCUGGUCGAAAACC. AGAGU. . . . .CGUUAGAAGGAG. . .UCCUU
env-186 AG CCUGAUCGAAAACC. AGGCA. . . . .AACAAAGAAGGAG. . .UCCUGUC
env-189 GC UCUGGUCGAAAACC. AGGGC. . . . .ACGAAAGAAGGAG. . .UCCUGCUAUG
env-190 GU CCUGGUCGAAAACC. AGGAC. . . . .ACGAAAGAAGGAG. . .ACCGAAAUG
Csp-3-1 GU CCUGGUCGAAAACC. AGGAC. .GCAUUCAGAGGAG. . .CCUGGCC
env-191 GC ACUGGUCGAAAACC. AGUGC. .CGUACGAGAAGGAG. . .CCUGGCC
env-192 GC ACUUGGUCGAAAACC. AGGCC. . . . .ACUAGAAGGAG. . .ACCAAC
Cba-3-1 GA CUUGGUCGAAAACC. AAGUC. . . . .CUCGAAAAGGAG. . .AACCAU
env-196 GU CCUGGUCGUAACC. AGGAC. .GCGACCAGAAGGAG. . .CCUGGCC
env-198 GU CCUGGUCGUAACC. AGGAC. .GUGACCAGAAGGAG. . .CCUGGCC
env-200 GU CCUGGUCGUAACC. AGGAC. .GUGACCAGAAGGAG. . .CCUGGCC
env-201 GC CCUGGUCG. . . . .AACC. . . . .CGACGAAACAGGAG. . .UCCUGCU
env-202 CC CUUGGUCGAAAACC. AAGGA. . . . .AGUUAGGAG. . .AACCA
Eca-1-1 UC CUUGGUCGAAAACC. AAGGG. . . . .AAGUAGGAG. . .AACCC
Emu-1-1 CC CUUGGUCGAAAACC. AAGGG. . . . .AAGUAGGAG. . .AACCC
env-206 AU CUUGGUCGAAAACC. AAGGU. . . . .AUUAGUAGGAG. . .AAUCA
Esp-3-1 GC CUUGGUCGAAAACC. AAGGC. . . . .AUGUCAAGGAG. . .AACAGAA
env-207 GC CUUGGUCGAAAACC. AAGGC. .ACUCUGCAAAGGAG. . .AAUACCAAUG
Gpa-1-1 GC CUUGGUCGAAAACC. AAGGC. . . . .CUGUCAAGGAG. . .AACCA
env-209 GC CCUGGUCGAAAACC. AGGGC. . . . .CCGUAAGGAG. . .UCCUGCA
env-211 GU CCUGGUCGAAAACC. AGGAC. . . . .CGACAAAGGAG. . .UCCUGCA
env-212 GC CUUGGUCGAAAACC. AAGGC. . . . .AUACAAAGGAG. . .CAAGA
env-213 GU CUUGGUCGAAAACC. AAGGC. . . . .AUAGUAAGGAG. . .AACCA
env-214 GC CUUGGUCGAAAACC. AAGGC. . . . .AUAGUAAGGAG. . .AACCA
env-216 GC CUUGGUCGGAACC. AAGGC. . . . .AUACGAAGGAG. . .AACCA
env-217 GC CUUGGUCGAAAACC. AAGGC. . . . .AUACGAAGGAG. . .AACCA
env-218 GC CUUGGUCGAAAACC. AAGGC. . . . .AUUAGAAGGAG. . .AACCA
env-220 GC CUUGGUCGAAAACC. AAGAC. . . . .AAUAAAAGGAG. . .AACCA
env-221 GU CUUGGUCGAAAACC. AAGAC. . . . .CGCAAAGGAG. . .AACCA
Sex-1-1 GC CUUGGUCGAAAACC. AAGGC. . . . .AUGAAAAGGAG. . .AACCA
Spi-1-1 GU CUUGGUCGAAAACC. AAGGC. . . . .GCCUGAAAAGGAG. . .AACCA
env-222 GC CUUGGUCGAAAACC. AAGGC. . . . .AGAAUAGGAG. . .AACCA
She-1-1 GU CUUGGUCGAAAACC. AAGAC. . . . .AUGAAAAGGAG. . .AACCA
env-223 GC CUUGGUCGAAAACC. AAGGC. . . . .GGAAAAGGAG. . .AAAACCAUG
env-224 GC CUUGGUCGAAAACC. AAGGC. . . . .GGAAAAGGAG. . .AACCA
env-225 GC CUUGGUCGAAAACC. AAGGC. . . . .CCGUAAGGAG. . .AACCA
env-234 GC CUUGGUCGAAAACC. AAGGC. . . . .CCGUAAGGAG. . .AACCA
env-235 GC CUUGGUCGAAAACC. AAGGC. . . . .AGAAAGGAG. . . . .AAUG
env-236 GC CUUGGUCGAAAACC. AAGGC. . . . .AGAAAGGAG. . .AACCA
env-237 AC CUUGGUCGAAAACC. AAGGC. . . . .GGAAUAGGAG. . . . .AAAUG
San-1-1 GC CUUGGUCGAAAACC. AAGGC. . . . .ACGUAAAAGGAG. . .AACCA
env-238 GC CCUGGUCGAAAACC. AGGGC. . . . .ACGAAAGAAGGAG. . .UCCAA
env-240 CG UCUGGUCGAAAACC. AGACC. . . . .UACCAAAGGAG. . .UCCUGCC
Cba-1-1 UG CCUGGUCGAAAACC. AGGCC. . . . .UACGUUAGGAG. . .UUGUC
Asp-3-1 CG CCUGGUCGAAAACC. AGGCC. . . . .UACGUUAGGAG. . .UUGUC
env-246 CG CCUGGUCGAAAACC. AGGCC. . . . .AAACGAAGGAG. . .UCCGAAAUG
Osp-1-1 UG UCUGGUCGAAAACC. AGGCC. . . . .GAAAGAAGGAG. . .UCCGAAA
env-247 CG CCUGGUCGAAAACC. AGGCC. . . . .UACCAAAGGAG. . .UCCAGU
env-248 CG CCUGGUCGAAAACC. AGGCA. . . . .AACCAAGGAG. . .UCCGAC
env-250 CG CCUGGUCGAAAACC. AGGCC. . . . .AAUCAAGGAG. . .UCCAA
env-251 CG CCUGGUCGAAAACC. AGGCC. . . . .AACCAAGGAG. . .UCCAA
env-256 CG CCUGGUCGAAAACC. AGGCC. . . . .AACGAAGGAG. . .CCA
env-257 UG CCUGGUCGAAAACC. AGGCC. . . . .AACGAAGGAG. . .UCA
env-259 CG CCUGGUCGAAAACC. AGGCC. . . . .AACGUUAGGAG. . .UCAGC
Ele-2-2 GC CGGCGCCGGAAGCG. CUGCC. . . . .GGAAAAGGAG. . .AACCA
<< <<<<<< . . . . .>>>> >>>>>> . . . . .
2. 222101 . . . . .101. 2222. . . . .
5'-YUGGUCGGAACC-ARR-C-----o●●●RAAGGAG--oY●●●AUG
5' 3'

```

11 L31-Firmicutes

11.1 Taxa

The taxonomy of each organism containing a putative L31-Firmicutes RNA is listed, with abbreviations identifying each hit (e.g., “Eco-1-1” and “Eco-1-2” is listed, with abbreviations identifying each hit (e.g., “Eco-1-1” and “Eco-1-2” might hypothetically represent two distinct RNAs in *E. coli*). The abbreviations will be used to identify each individual L31-Firmicutes RNA in Sections 11.3 and 11.5:.

abbrev. of hits

Mab-1-1 to Mab-1-2

bLF-1-1

Axy-1-1

Afl-1-1

Bam-1-1

Bam-2-1

Bam-3-1

Bam-7-1

Bam-8-1

Bam-4-1

Bam-5-1

Bam-6-1

Bat-1-1

Baz-1-1

Bba-1-1

Bce-1-1

Bcl-1-1

Bco-1-1

Bco-2-1

Bco-3-1

Bha-1-1

Bis-1-1

Bli-1-1 to Bli-1-2

Bma-1-1

Bme-1-1

Bme-2-1

Bme-3-1

Bme-4-1

Bps-1-1

Bps-2-1

Bpu-1-1

Bpu-2-1

Bse-1-1

Bsp-1-1

Bsp-2-1

Bsp-3-1

Bsp-4-1

Bsp-5-1

Bsp-6-1

Bsp-8-1

Bsp-7-1

Bsu-1-1

Bsu-2-1

Bsu-3-1

Bsu-5-1

Bsu-4-1

Bsu-6-1 to Bsu-6-2

Bsu-7-1

Bsu-8-1

Bsu-9-1

Bsu-10-1

Ban-2-1

Ban-3-1

Ban-4-1

Ban-5-1

Ban-6-1

Ban-7-1

Ban-8-1

Ban-9-1

Ban-10-1

Ban-11-1

Ban-12-1

Ban-13-1

Ban-14-1

taxonomy of species

Bacteria Actinobacteria Corynebacteriales Mycobacteriaceae *Mycobacterium abscessus*

Bacteria bacterium LF-3

Bacteria Firmicutes Bacillales Bacillaceae *Amphibacillus xylanus* NBRC 15112Bacteria Firmicutes Bacillales Bacillaceae *Anoxybacillus flavithermus* WK1Bacteria Firmicutes Bacillales Bacillaceae *Bacillus amyloliquefaciens* DSM7Bacteria Firmicutes Bacillales Bacillaceae *Bacillus amyloliquefaciens* FZB42Bacteria Firmicutes Bacillales Bacillaceae *Bacillus amyloliquefaciens* LL3Bacteria Firmicutes Bacillales Bacillaceae *Bacillus amyloliquefaciens* subsp. *plantarum* CAU B946Bacteria Firmicutes Bacillales Bacillaceae *Bacillus amyloliquefaciens* subsp. *plantarum* YAU B9601-Y2Bacteria Firmicutes Bacillales Bacillaceae *Bacillus amyloliquefaciens* TA208Bacteria Firmicutes Bacillales Bacillaceae *Bacillus amyloliquefaciens* XH7Bacteria Firmicutes Bacillales Bacillaceae *Bacillus amyloliquefaciens* Y2Bacteria Firmicutes Bacillales Bacillaceae *Bacillus atrophaeus* 1942Bacteria Firmicutes Bacillales Bacillaceae *Bacillus azotoformans* LMG 9581Bacteria Firmicutes Bacillales Bacillaceae *Bacillus bataviensis* LMG 21833Bacteria Firmicutes Bacillales Bacillaceae *Bacillus cellulosilyticus* DSM 2522Bacteria Firmicutes Bacillales Bacillaceae *Bacillus clausii* KSM-K16Bacteria Firmicutes Bacillales Bacillaceae *Bacillus coagulans* 2-6Bacteria Firmicutes Bacillales Bacillaceae *Bacillus coagulans* 36D1Bacteria Firmicutes Bacillales Bacillaceae *Bacillus coahuilensis* m4-4Bacteria Firmicutes Bacillales Bacillaceae *Bacillus halodurans* C-125Bacteria Firmicutes Bacillales Bacillaceae *Bacillus isronensis* B3W22Bacteria Firmicutes Bacillales Bacillaceae *Bacillus licheniformis* ATCC 14580 (DSM 13)Bacteria Firmicutes Bacillales Bacillaceae *Bacillus macauensis* ZFHKF-1Bacteria Firmicutes Bacillales Bacillaceae *Bacillus megaterium* DSM 319Bacteria Firmicutes Bacillales Bacillaceae *Bacillus megaterium* QM B1551Bacteria Firmicutes Bacillales Bacillaceae *Bacillus megaterium* WSH-002Bacteria Firmicutes Bacillales Bacillaceae *Bacillus methanolicus* PB1Bacteria Firmicutes Bacillales Bacillaceae *Bacillus pseudofirmus* OF4Bacteria Firmicutes Bacillales Bacillaceae *Bacillus pseudomycooides* DSM 12442Bacteria Firmicutes Bacillales Bacillaceae *Bacillus pumilus* ATCC 7061Bacteria Firmicutes Bacillales Bacillaceae *Bacillus pumilus* SAFR-032Bacteria Firmicutes Bacillales Bacillaceae *Bacillus selenitireducens* MLS10Bacteria Firmicutes Bacillales Bacillaceae *Bacillus* sp. 5B6Bacteria Firmicutes Bacillales Bacillaceae *Bacillus* sp. 916Bacteria Firmicutes Bacillales Bacillaceae *Bacillus* sp. B14905Bacteria Firmicutes Bacillales Bacillaceae *Bacillus* sp. HYC-10Bacteria Firmicutes Bacillales Bacillaceae *Bacillus* sp. JSBacteria Firmicutes Bacillales Bacillaceae *Bacillus* sp. M 2-6Bacteria Firmicutes Bacillales Bacillaceae *Bacillus* sp. m3-13Bacteria Firmicutes Bacillales Bacillaceae *Bacillus* sp. NRRL B-14911Bacteria Firmicutes Bacillales Bacillaceae *Bacillus subtilis* BSn5Bacteria Firmicutes Bacillales Bacillaceae *Bacillus subtilis* QB928Bacteria Firmicutes Bacillales Bacillaceae *Bacillus subtilis* subsp. *spizizenii* ATCC 6633Bacteria Firmicutes Bacillales Bacillaceae *Bacillus subtilis* subsp. *spizizenii* str. W23Bacteria Firmicutes Bacillales Bacillaceae *Bacillus subtilis* subsp. *spizizenii* TU-B-10Bacteria Firmicutes Bacillales Bacillaceae *Bacillus subtilis* subsp. *subtilis* str. 168Bacteria Firmicutes Bacillales Bacillaceae *Bacillus subtilis* subsp. *subtilis* str. JH642Bacteria Firmicutes Bacillales Bacillaceae *Bacillus subtilis* subsp. *subtilis* str. NCIB 3610Bacteria Firmicutes Bacillales Bacillaceae *Bacillus subtilis* subsp. *subtilis* str. RO-NN-1Bacteria Firmicutes Bacillales Bacillaceae *Bacillus subtilis* subsp. *subtilis* str. SMYBacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. 'Ames Ancestor'Bacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. A0174Bacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. A0193Bacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. A0248Bacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. A0389Bacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. A0442Bacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. A0465Bacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. A0488Bacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. A1055Bacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. AmesBacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. Australia 94Bacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. CDC 684Bacteria Firmicutes Bacillales Bacillaceae Bacillus Bacilluscereus group *Bacillus anthracis* str. CNEVA-9066

Bth-11-1	Bacteria Firmicutes Bacillales Bacillaceae	Bacillus Bacilluscereus group	<i>Bacillus thuringiensis</i> serovar <i>huazhongensis</i> BGSC 4BD1
Bth-12-1	Bacteria Firmicutes Bacillales Bacillaceae	Bacillus Bacilluscereus group	<i>Bacillus thuringiensis</i> serovar <i>konkukian</i> str. 97-27
Bth-13-1	Bacteria Firmicutes Bacillales Bacillaceae	Bacillus Bacilluscereus group	<i>Bacillus thuringiensis</i> serovar <i>kurstaki</i> str. T03a001
Bth-14-1	Bacteria Firmicutes Bacillales Bacillaceae	Bacillus Bacilluscereus group	<i>Bacillus thuringiensis</i> serovar <i>monterrey</i> BGSC 4AJ1
Bth-15-1	Bacteria Firmicutes Bacillales Bacillaceae	Bacillus Bacilluscereus group	<i>Bacillus thuringiensis</i> serovar <i>pakistanii</i> str. T13001
Bth-16-1	Bacteria Firmicutes Bacillales Bacillaceae	Bacillus Bacilluscereus group	<i>Bacillus thuringiensis</i> serovar <i>pondicheriensis</i> BGSC 4BA1
Bth-17-1	Bacteria Firmicutes Bacillales Bacillaceae	Bacillus Bacilluscereus group	<i>Bacillus thuringiensis</i> serovar <i>pulstensis</i> BGSC 4CC1
Bth-18-1	Bacteria Firmicutes Bacillales Bacillaceae	Bacillus Bacilluscereus group	<i>Bacillus thuringiensis</i> serovar <i>thuringiensis</i> str. T01001
Bth-19-1	Bacteria Firmicutes Bacillales Bacillaceae	Bacillus Bacilluscereus group	<i>Bacillus thuringiensis</i> serovar <i>tochigiensis</i> BGSC 4Y1
Bth-20-1	Bacteria Firmicutes Bacillales Bacillaceae	Bacillus Bacilluscereus group	<i>Bacillus thuringiensis</i> str. Al Hakam
Bwe-1-1	Bacteria Firmicutes Bacillales Bacillaceae	Bacillus Bacilluscereus group	<i>Bacillus weihenstephanensis</i> KBAB4
Cth-1-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Caldalkalibacillus thermarum</i> TA2.A1	
Gka-1-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Geobacillus kaustophilus</i> HTA426	
Gsp-1-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Geobacillus</i> sp. C56-T3	
Gsp-2-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Geobacillus</i> sp. G11MC16	
Gsp-3-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Geobacillus</i> sp. WCH70	
Gsp-4-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Geobacillus</i> sp. Y4.1MC1	
Gsp-5-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Geobacillus</i> sp. Y412MC10	
Gsp-6-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Geobacillus</i> sp. Y412MC52	
Gsp-7-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Geobacillus</i> sp. Y412MC61	
Gth-1-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Geobacillus thermodenitrificans</i> NG80-2	
Gth-2-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Geobacillus thermoglucosidasius</i> C56-YS93	
Gth-3-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Geobacillus thermoleovorans</i> CCB_US3_UF5	
Hha-1-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Halobacillus halophilus</i> DSM 2266	
Lsp-1-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Lentibacillus</i> sp. Grbi	
Lfu-1-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Lysinibacillus fusiformis</i> ZC1	
Oih-1-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Oceanobacillus ihyensii</i> HTE831	
Osc-1-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Ornithinibacillus scapharcae</i> TW25	
Ssp-1-1	Bacteria Firmicutes Bacillales Bacillaceae	<i>Salimicrobium</i> sp. MJ3	
Gha-1-1	Bacteria Firmicutes Bacillales Bacillales Family XI. IncertaeSedis	<i>Gemella haemolysans</i> ATCC 10379	
Ean-1-1	Bacteria Firmicutes Bacillales Bacillales Family XII. IncertaeSedis	<i>Exiguobacterium antarcticum</i> B7	
Esi-1-1	Bacteria Firmicutes Bacillales Bacillales Family XII. IncertaeSedis	<i>Exiguobacterium sibiricum</i> 255-15	
Esp-1-1	Bacteria Firmicutes Bacillales Bacillales Family XII. IncertaeSedis	<i>Exiguobacterium</i> sp. AT1b	
Lin-1-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria innocua</i> Clip11262	
Liv-1-1 to Liv-1-2	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria ivanovii</i> subsp. <i>ivanovii</i> PAM 55	
Lmo-1-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> 07PF0776	
Lmo-2-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> 08-5923	
Lmo-3-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> 10403S	
Lmo-4-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> ATCC 19117	
Lmo-5-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> Clip80459	
Lmo-6-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> EGD-e	
Lmo-7-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> F6900	
Lmo-13-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> Finland 1998	
Lmo-8-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> FSL J1-194	
Lmo-9-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> FSL N1-017	
Lmo-10-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> FSL N3-165	
Lmo-11-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> FSL R2-503	
Lmo-12-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> FSL R2-561	
Lmo-14-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> HCC23	
Lmo-15-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> HPB2262	
Lmo-16-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> J0161	
Lmo-17-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> J2818	
Lmo-18-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> L312	
Lmo-19-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> L99	
Lmo-20-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> M7	
Lmo-29-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> serotype 7 str. SLCC2482	
Lmo-21-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SLCC2372	
Lmo-22-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SLCC2376	
Lmo-23-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SLCC2378	
Lmo-24-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SLCC2479	
Lmo-25-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SLCC2540	
Lmo-26-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SLCC2755	
Lmo-27-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SLCC5850	
Lmo-28-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SLCC7179	
Lmo-30-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes</i> str. 1/2a F6854	

Lmo-31-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes str. 4b</i> F2365
Lmo-32-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria monocytogenes str. 4b</i> H7858
Lse-1-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria seeligeri serovar 1/2b str.</i> SLCC3954
Lwe-1-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>Listeria welshimeri serovar 6b str.</i> SLCC5334
Lba-1-1	Bacteria Firmicutes Bacillales Listeriaceae	<i>bacterium</i> TTU M1-001
Mca-1-1	Bacteria Firmicutes Bacillales	<i>Macrococcus caseolyticus</i> JCSC5402
Bbr-1-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Brevibacillus brevis</i> NBRC 100599
Bsp-9-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Brevibacillus sp.</i> BC25
Bsp-10-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Brevibacillus sp.</i> CF112
Pal-1-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus alvei</i> DSM 29
Pcu-1-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus curdolanolyticus</i> YK9
Pel-1-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus elgii</i> B69
Pla-1-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus lactis</i> 154
Pla-2-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus larvae subsp. larvae</i> BRL-230010
Pmu-1-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus mucilaginosus</i> 3016
Pmu-2-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus mucilaginosus</i> KNP414
Ppe-1-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus peoriae</i> KCTC 3763
Ppo-1-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus polymyxa</i> M1
Psp-1-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> Aloe-11
Psp-2-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> HGF5
Psp-3-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> HGF7
Psp-4-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> JDR-2
Psp-5-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus sp. oral taxon</i> 786 str. D14
Pte-1-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus terrae</i> HPL-003
Pvo-1-1	Bacteria Firmicutes Bacillales Paenibacillaceae	<i>Paenibacillus vortex</i> V453
Pan-1-1	Bacteria Firmicutes Bacillales Planococcaceae	<i>Planococcus antarcticus</i> DSM 14505
Pdo-1-1	Bacteria Firmicutes Bacillales Planococcaceae	<i>Planococcus donghaensis</i> MPA1U2
Ssi-1-1	Bacteria Firmicutes Bacillales Planococcaceae	<i>Solibacillus silvestris</i> StLB046
Svi-1-1 to Svi-1-2	Bacteria Firmicutes Bacillales Sporolactobacillaceae	<i>Sporolactobacillus vineae</i> DSM 21990 = SL153
Sar-1-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus arlettae</i> CVD059
Sau-1-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> 04-02981
Sau-2-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> 08BA02176
Sau-3-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> 930918-3
Sau-4-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A10102
Sau-5-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A5937
Sau-6-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A5948
Sau-7-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A6224
Sau-8-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A6300
Sau-9-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A8115
Sau-10-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A8117
Sau-11-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A8796
Sau-12-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A8819
Sau-13-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A9299
Sau-14-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A9635
Sau-15-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A9719
Sau-16-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A9754
Sau-17-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A9763
Sau-18-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A9765
Sau-19-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> A9781
Sau-20-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> D30
Sau-21-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus</i> RF122
Sau-22-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> 11819-97
Sau-23-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> 132
Sau-24-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> 58-424
Sau-25-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> 65-1322
Sau-26-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> 68-397
Sau-27-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> 71193
Sau-28-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> A017934/97
Sau-29-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> ATCC 51811
Sau-30-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> ATCC BAA-39
Sau-31-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> Btn1260
Sau-32-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> C101
Sau-33-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> C160
Sau-34-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> C427
Sau-35-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i> COL

Sau-36-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	D139
Sau-37-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	E1410
Sau-38-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	ECT-R 2
Sau-39-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	ED133
Sau-40-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	ED98
Sau-41-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	EMRSA16
Sau-42-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	H19
Sau-43-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	HO 5096 0412
Sau-44-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	JH1
Sau-45-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	JH9
Sau-46-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	JKD6159
Sau-47-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	LGA251
Sau-48-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	M013
Sau-49-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	M1015
Sau-50-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	M809
Sau-51-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	M876
Sau-52-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	M899
Sau-53-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	MN8
Sau-54-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	MR1
Sau-55-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	MRSA252
Sau-56-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	MSHR1132
Sau-57-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	MSSA476
Sau-59-1 to Sau-59-2	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	Mu3
Sau-60-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	Mu50
Sau-61-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	Mu50-omega
Sau-58-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	MW2
Sau-62-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	N315
Sau-63-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	NCTC 8325
Sau-64-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	ST398
Sau-75-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus str.</i>	CF-Marseille
Sau-76-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus str.</i>	JKD6008
Sau-77-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus str.</i>	JKD6009
Sau-78-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus str.</i>	Newman
Sau-65-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	T0131
Sau-66-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	TCH130
Sau-67-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	TCH60
Sau-68-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	TW20
Sau-69-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	USA300_FPR3757
Sau-70-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	USA300_TCH1516
Sau-71-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	USA300_TCH959
Sau-72-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VC40
Sau-73-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	WBG10049
Sau-74-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	WW2703/97
Sca-1-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus capitis</i>	SK14
Sca-2-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus caprae</i>	C87
Sca-3-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus carnosus subsp. carnosus</i>	TM300
Sep-1-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus epidermidis</i>	ATCC 12228
Sep-2-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus epidermidis</i>	BCM-HMP0060
Sep-3-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus epidermidis</i>	M23864:W1
Sep-4-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus epidermidis</i>	M23864:W2(grey)
Sep-5-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus epidermidis</i>	RP62A
Sep-6-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus epidermidis</i>	SK135
Sep-7-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus epidermidis</i>	W23144
Seq-1-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus equorum subsp. equorum</i>	Mu2
Sha-1-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus haemolyticus</i>	JCSC1435
Sho-1-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus hominis</i>	SK119
Sho-2-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus hominis subsp. hominis</i>	C80
Slu-1-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus lugdunensis</i>	HKU09-01
Slu-2-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus lugdunensis</i>	N920143
Sps-1-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus pseudintermedius</i>	ED99
Sps-2-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus pseudintermedius</i>	HKU10-03
Ssa-1-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus saprophyticus subsp. saprophyticus</i>	ATCC 15305
Ssi-2-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus simiae</i>	CCM 7213
Ssp-2-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus sp.</i>	OJ82
Swa-1-1	Bacteria Firmicutes Bacillales	<i>Staphylococcus warneri</i>	L37603

Apa-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Aeribacillus pallidus</i>
Aha-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Alkalibacillus haloalkaliphilus</i> C5
Aji-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Amphibacillus jilinensis</i> Y1
Ama-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anaerobacillus macyae</i>
Aay-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus ayderensis</i>
Afl-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus flavithermus</i>
Afl-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus flavithermus</i> AK1
Afl-4-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus flavithermus</i> NBRC 109594
Afl-6-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus flavithermus</i> subsp. <i>yunnanensis</i> str. E13
Afl-5-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus flavithermus</i> TNO-09.006
Age-1-1 to Age-1-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus geothermalis</i>
Ago-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus gonensis</i>
Aka-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus kamchatkensis</i> G10
Asp-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus</i> sp. BCO1
Asp-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus</i> sp. DT3-1
Asp-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus</i> sp. KU2-6(11)
Asp-4-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus</i> sp. SK3-4
Ate-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus tepidamans</i> PS2
Ath-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Anoxybacillus thermarum</i>
Bac-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus acidiproducens</i> DSM 23148
Bae-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus aerophilus</i>
Bak-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus akibai</i> JCM 9157
Bal-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus alcalophilus</i> ATCC 27647 = CGMCC 1.3604
Bal-2-1 to Bal-2-3	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus altitudinis</i>
Bal-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus altitudinis</i> 41KF2b
Bal-4-1 to Bal-4-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus alveayuensis</i>
Bam-9-1 to Bam-9-3	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i>
Bam-10-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i> CC178
Bam-11-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i> EGD-AQ14
Bam-9-1 to Bam-9-3	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> <i>Bacillus amyloliquefaciens</i> group <i>Bacillus amyloliquefaciens</i>
Bam-15-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> <i>Bacillus amyloliquefaciens</i> group <i>Bacillus amyloliquefaciens</i> EBL11
Bam-16-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> <i>Bacillus amyloliquefaciens</i> group <i>Bacillus amyloliquefaciens</i> HB-26
Bam-17-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> <i>Bacillus amyloliquefaciens</i> group <i>Bacillus amyloliquefaciens</i> KHG19
Bam-18-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> <i>Bacillus amyloliquefaciens</i> group <i>Bacillus amyloliquefaciens</i> Lx-11
Bsi-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> <i>Bacillus amyloliquefaciens</i> group <i>Bacillus siamensis</i>
Bve-1-1 to Bve-1-4	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> <i>Bacillus amyloliquefaciens</i> group <i>Bacillus velezensis</i>
Bve-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> <i>Bacillus amyloliquefaciens</i> group <i>Bacillus velezensis</i> NJN-6
Bve-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> <i>Bacillus amyloliquefaciens</i> group <i>Bacillus velezensis</i> SK19.001
Bve-4-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> <i>Bacillus amyloliquefaciens</i> group <i>Bacillus velezensis</i> SQR9
Bve-5-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> <i>Bacillus amyloliquefaciens</i> group <i>Bacillus velezensis</i> TrigoCor1448
Bam-12-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i> IT-45
Bam-13-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i> LFB112
Bam-19-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i> subsp. <i>amyloliquefaciens</i> DC-12
Bam-20-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i> subsp. <i>plantarum</i> AS43.3
Bam-21-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i> subsp. <i>plantarum</i> M27
Bam-22-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i> subsp. <i>plantarum</i> NAU-B3
Bam-23-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i> subsp. <i>plantarum</i> UCMB5033
Bam-24-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i> subsp. <i>plantarum</i> UCMB5036
Bam-25-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i> subsp. <i>plantarum</i> UCMB5113
Bam-14-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus amyloliquefaciens</i> UASWS BA1
Ban-20-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus andreraoultii</i>
Baq-1-1 to Baq-1-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus aquimaris</i>
Bar-1-1 to Bar-1-5	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus aryabhatai</i>
Bar-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus aryabhatai</i> B8W22
Bat-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i>
Bat-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i> 1013-1
Bat-4-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i> 1013-2
Bat-5-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i> ATCC 49822-1
Bat-6-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i> ATCC 49822-2
Bat-7-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i> ATCC 9372-1
Bat-8-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i> ATCC 9372-2
Bat-9-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i> BAC1051-E
Bat-10-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i> BAC1051-N
Bat-11-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i> C89
Bat-12-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i> Detrick-1

Bat-13-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i>	Detrick-2
Bat-14-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i>	Detrick-3
Bat-16-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i>	str. Dugway
Bat-17-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i>	subsp. <i>globigii</i>
Bat-15-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus atrophaeus</i>	UCMB-5137
Bau-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus aurantiacus</i>	DSM 18675
Baz-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus azotoformans</i>	MEV2011
Bba-2-1 to Bba-2-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus badius</i>	
Bbo-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus bogoriensis</i>	ATCC BAA-922
Bbo-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus bombysepticus</i>	str. Wang
Bbo-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus boroniphilus</i>	JCM 21738
Bbu-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus butanolivorans</i>	
Bca-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus campisalis</i>	
Ban-21-1 to Ban-21-20	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i>
Ban-22-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> 52-G
Ban-23-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> 8903-G
Ban-24-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> 9080-G
Ban-25-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> CZC5
Ban-26-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. 3154
Ban-27-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. 3166
Ban-28-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. A16
Ban-29-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. A16R
Ban-30-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. BF1
Ban-31-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. Carbosap
Ban-32-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. Gmb1
Ban-33-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. Heroin Ba4599
Ban-35-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. Sen2Col2
Ban-36-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. Sen3
Ban-17-1 to Ban-17-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. Sterne
Ban-34-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. SVA11
Ban-37-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. Turkey32
Ban-38-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. V770-NP-1R
Ban-39-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. V770-NP1-R
Ban-18-1 to Ban-18-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus anthracis</i> str. Vollum
Bce-47-1 to Bce-47-5	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i>
Bce-2-1 to Bce-2-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> 03BB102
Bce-48-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> 03BB108
Bce-49-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> AND1407
Bce-14-1 to Bce-14-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> ATCC 10876
Bce-17-1 to Bce-17-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> ATCC 4342
Bce-50-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> B5-2
Bce-51-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG10-1
Bce-52-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG10-2
Bce-53-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG10-3
Bce-54-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG1X1-1
Bce-55-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG1X1-2
Bce-56-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG1X1-3
Bce-57-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG1X2-1
Bce-58-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG1X2-2
Bce-59-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG1X2-3
Bce-60-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG20-1
Bce-61-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG20-2
Bce-62-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG20-3
Bce-63-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG2X1-1
Bce-64-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG2X1-2
Bce-65-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG2X1-3
Bce-66-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG30-1
Bce-67-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG30-2
Bce-68-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG3X2-1
Bce-69-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG3X2-2
Bce-70-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG40-1
Bce-71-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG4X12-1
Bce-72-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG4X2-1
Bce-73-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG50-1
Bce-74-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus cereus</i> group <i>Bacillus cereus</i> BAG5X1-1

Bce-137-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus cereus</i>	VD196
Bce-138-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus cereus</i>	VD200
Bce-139-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus cereus</i>	VD214
Bce-140-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus cereus</i>	VDM006
Bce-141-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus cereus</i>	VDM019
Bce-142-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus cereus</i>	VDM021
Bce-143-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus cereus</i>	VDM022
Bce-144-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus cereus</i>	VDM034
Bce-145-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus cereus</i>	VDM053
Bce-146-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus cereus</i>	VDM062
Bcy-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus cytotoxicus</i>	
Bga-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus gaemokensis</i>	
Bma-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus mantliponensis</i>	
Bmy-4-1 to Bmy-4-4	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus mycoides</i>	
Bmy-5-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus mycoides</i>	FSL H7-687
Bmy-6-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus mycoides</i>	FSL R5-860
Bmy-7-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus mycoides</i>	NBRC 101238 = DSM 11821
Bsp-11-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus sp.</i>	7.6_55CFAA_CT2
Bth-21-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis</i>	
Bth-22-1 to Bth-22-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis</i>	DAR 81934
Bth-23-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis</i>	DB27
Bth-24-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis</i>	HD-789
Bth-25-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis</i>	HD1002
Bth-26-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis</i>	JM-Mgvvxx-63
Bth-27-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis</i>	LM1212
Bth-28-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis</i>	Sbt003
Bth-31-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar aizawai str.</i>	Hu4-2
Bth-32-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar aizawai str.</i>	Leapi01
Bth-33-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar galleriae</i>	
Bth-34-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar indiana</i>	
Bth-35-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar israelensis</i>	
Bth-36-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar kurstaki</i>	
Bth-37-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar kurstaki str.</i>	HD-1
Bth-38-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar kurstaki str.</i>	HD73
Bth-39-1 to Bth-39-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar kurstaki str.</i>	YBT-1520
Bth-40-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar mexicanensis</i>	
Bth-41-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar morrisoni</i>	
Bth-42-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar thuringiensis str.</i>	IS5056
Bth-43-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis serovar tolworthi</i>	NA205-3
Bth-29-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis</i>	T01-328
Bth-30-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus thuringiensis</i>	YBT-1518
Bto-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus toyonensis</i>	BCT-7112
Bwe-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus	Bacillus	cereus	group	<i>Bacillus weihenstephanensis</i>	
Bch-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus chagannorensis</i>				DSM 18086	
Bci-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus cihuenensis</i>					
Bci-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus circulans</i>					
Bcl-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus clausii</i>					
Bco-4-1 to Bco-4-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus coagulans</i>					
Bco-5-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus coagulans</i>	CSIL1				
Bco-6-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus coagulans</i>	DSM 1 = ATCC 7050				
Bco-7-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus coagulans</i>	H-1				
Bco-8-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus coagulans</i>	P38				
Bco-9-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus coagulans</i>	XZL4				
Bco-10-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus coagulans</i>	XZL9				
Bdi-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus dielmoensis</i>					
Ben-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus endophyticus</i>					
Ben-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus endophyticus</i>	2102				
Bfi-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus firmus</i>					
Bfi-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus firmus</i>	DS1				
Bfl-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus flexus</i>					
Bfl-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus flexus</i>	27Col1.1E				
Bfl-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus flexus</i>	T6186-2				
Bfo-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus fordii</i>	DSM 16014				
Bgi-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus ginsengihumi</i>					
Bgi-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus ginsengihumi</i>	J57				

Bgl-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus glycinifermentans</i>
Bhe-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus hemicellulosilyticus</i> JCM 9152
Bin-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus indicus</i>
Bin-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus indicus</i> LMG 22858
Bin-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus infantis</i> NRRL B-14911
Bje-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus jeddahensis</i>
Bko-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus koreensis</i>
Bkr-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus kribbensis</i> DSM 17871
Ble-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus lehensis</i> G1
Bli-2-1 to Bli-2-3	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus licheniformis</i>
Bli-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus licheniformis</i> 10-1-A
Bli-4-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus licheniformis</i> 5-2-D
Bli-5-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus licheniformis</i> 9945A
Bli-6-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus licheniformis</i> CG-B52
Bli-7-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus licheniformis</i> CGMCC 3963
Bli-8-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus licheniformis</i> F1-1
Bli-9-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus licheniformis</i> F2-1
Bli-10-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus licheniformis</i> S 16
Bli-11-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus licheniformis</i> WX-02
Blo-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus loiseleuriae</i>
Bma-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus mannanilyticus</i> JCM 10596
Bma-4-1 to Bma-4-4	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus marisflavi</i>
Bma-5-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus marmarensis</i> DSM 21297
Bma-6-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus massiliogorillae</i>
Bma-7-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus massiosenegalensis</i> JC6
Bme-5-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus megaterium</i>
Bme-6-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus megaterium</i> MSP20.1
Bme-7-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus megaterium</i> NBRC 15308 = ATCC 14581
Bme-8-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus megaterium</i> NCT-2
Bme-9-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus megaterium</i> Q3
Bme-10-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus methanolicus</i> MGA3
Bmo-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus mojavensis</i> RO-H-1 = KCTC 3706
Bmo-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus mojavensis</i> RRC 101
Bmu-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus murimartini</i>
Bnd-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus ndiopicus</i>
Bne-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus nealsonii</i> AAU1
Bni-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus niacini</i>
Boc-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus oceanisediminis</i> 2691
Bok-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus okhensis</i>
Bok-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus okuhidensis</i>
Bpa-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus panaciterrae</i> DSM 19096
Bpa-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus paralicheniformis</i>
Bpa-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus paralicheniformis</i> G-1
Bps-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus pseudocaliphilus</i>
Bps-4-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus psychrosaccharolyticus</i> ATCC 23296
Bpu-3-1 to Bpu-3-3	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus pumilus</i>
Bpu-4-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus pumilus</i> BA06
Bpu-5-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus pumilus</i> CCMA-560
Bpu-6-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus pumilus</i> INR7
Bpu-7-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus pumilus</i> S-1
Bru-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus rubiinfantis</i>
Bsa-1-1 to Bsa-1-3	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus safensis</i>
Bsa-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus safensis</i> FO-36b
Bsa-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus safensis</i> VK
Bse-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus selenatarsenatis</i> SF-1
Bsi-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus siamensis</i> KCTC 13613
Bsi-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus simplex</i> BA2H3
Bsm-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus smithii</i>
Bsm-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus smithii</i> 7_3.47FAA
Bso-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sonorensis</i> L12
Bso-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sonorensis</i> NBRC 101234 = KCTC 13918
Bsp-12-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> sp. (<i>in</i> : Bacteria)
Bsp-13-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> sp. 10403023
Bsp-14-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> sp. 105MF
Bsp-15-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i> sp. 123MFChir2

Bsp-16-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	171095_106
Bsp-17-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	17376
Bsp-18-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	1NLA3E
Bsp-19-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	220_BSPC
Bsp-20-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	278922_107
Bsp-21-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	2_A_57_CT2
Bsp-22-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	37MA
Bsp-23-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	445_BSPC
Bsp-24-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	522_BSPC
Bsp-25-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	72
Bsp-26-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	95MFCvi2.1
Bsp-27-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	A053
Bsp-28-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	AP8
Bsp-29-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	Aph1
Bsp-30-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	B-jedd
Bsp-31-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	BH072
Bsp-32-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	BSC154
Bsp-33-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	BT1B_CT2
Bsp-34-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	CMAA 1185
Bsp-36-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	Co1-6
Bsp-35-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	CPSM8
Bsp-37-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	EB01
Bsp-38-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	EGD-AK10
Bsp-39-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	FJAT-13831
Bsp-40-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	FJAT-14578
Bsp-41-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	FJAT-26652
Bsp-42-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	FJAT-27231
Bsp-43-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	FJAT-27238
Bsp-44-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	FJAT-27245
Bsp-45-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	FJAT-27251
Bsp-46-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	FJAT-27445
Bsp-47-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	FJAT-27916
Bsp-49-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	GeD10
Bsp-48-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	GO-13
Bsp-50-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	H1a
Bsp-51-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	H1m
Bsp-52-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	J13
Bsp-53-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	J33
Bsp-54-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	J37
Bsp-55-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	JCA
Bsp-56-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	JCM 19045
Bsp-57-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	JCM 19046
Bsp-58-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	JCM 19047
Bsp-59-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	JFL15
Bsp-60-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	KJ-16
Bsp-61-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	KW-12
Bsp-62-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	L1(2012)
Bsp-68-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	L_1B0_12
Bsp-69-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	L_1B0_5
Bsp-70-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	L_1B0_8
Bsp-63-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	LK10
Bsp-64-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	LK2
Bsp-65-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	LK7
Bsp-66-1 to Bsp-66-2	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	LL01
Bsp-67-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	LM 4-2
Bsp-71-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	MB2021
Bsp-72-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	MSP13
Bsp-73-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	MSP5.4
Bsp-74-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	NSP2.1
Bsp-75-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	NSP22.2
Bsp-76-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	NSP9.1
Bsp-77-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	OxB-1
Bsp-78-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	Pc3
Bsp-79-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	REN51N
Bsp-80-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus sp.</i>	RP1137

Bsp-81-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> SA1-12
Bsp-82-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> SB47
Bsp-83-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> SB49
Bsp-84-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> SJS
Bsp-85-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> TH008
Bsp-86-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> TS-2
Bsp-87-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> UMTAT18
Bsp-88-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> UNC125MFCrub1.1
Bsp-89-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> UNC322MFCChr4.1
Bsp-90-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> UNC41MFS5
Bsp-91-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> UNC437CL72CviS29
Bsp-92-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> UNC438CL73TsuS30
Bsp-93-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> UNC69MF
Bsp-94-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> URHB0009
Bsp-95-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> WPS
Bsp-96-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> X1(2014)
Bsp-97-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> YP1
Bsp-98-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus sp.</i> ZYK
Bst-1-1 to Bst-1-6	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus stratosphericus</i>
Bst-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus stratosphericus</i> LAMA 585
Bsu-11-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subterraneus</i>
Bsu-12-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i>
Bsu-13-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> B7-s
Bsu-14-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> BEST7003
Bsu-15-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> E1
Bsu-16-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> GB03
Bsu-28-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> gtP20b
Bsu-18-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> Hal1
Bsu-17-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> HJ5
Bsu-19-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> KCTC 1028
Bsu-20-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> MB73/2
Bsu-21-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> Miyagi-4
Bsu-22-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> PS216
Bsu-23-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> PTS-394
Bsu-24-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> PY79
Bsu-25-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> QH-1
Bsu-26-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> S1-4
Bsu-29-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>inaquosorum</i> KCTC 13429
Bsu-30-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>natto</i> BEST195
Bsu-31-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>niger</i>
Bsu-32-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>spizizenii</i>
Bsu-33-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>spizizenii</i> DV1-B-1
Bsu-34-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>spizizenii</i> RFWG1A3
Bsu-35-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>spizizenii</i> RFWG1A4
Bsu-36-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>spizizenii</i> RFWG4C10
Bsu-37-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>spizizenii</i> RFWG5B15
Bsu-38-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>subtilis</i>
Bsu-39-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> 6051-HGW
Bsu-6-1 to Bsu-6-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> str. 168
Bsu-40-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> str. AG1839
Bsu-41-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> str. AUSI98
Bsu-42-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> str. BAB-1
Bsu-43-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> str. BSP1
Bsu-44-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> str. JH642 substr. AG174
Bsu-45-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> str. MP11
Bsu-46-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> str. MP9
Bsu-47-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> str. OH 131.1
Bsu-48-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> subsp. <i>subtilis</i> str. SC-8
Bsu-27-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus subtilis</i> XF-1
Bte-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus tequilensis</i> KCTC 13622
Bte-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus testis</i>
Bth-44-1 to Bth-44-5	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus thermoamylovorans</i>
Bva-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus vallismortis</i> DV1-F-3
Bvi-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus vietnamensis</i>
Bvi-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus vireti</i>

Bvi-3-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus vireti</i> LMG 21834
Bwa-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus wakoensis</i> JCM 9140
Bzh-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Bacillus zhangzhouensis</i>
Cde-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Caldibacillus debilis</i> DSM 16016
Den-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Domibacillus enclensis</i>
Din-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Domibacillus indicus</i>
Dro-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Domibacillus robiginosus</i>
Dtu-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Domibacillus tundrae</i>
Fge-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Fictibacillus gelatini</i> DSM 15865
Gca-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus caldorylosilyticus</i> CIC9
Gic-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus icigianus</i>
Gka-2-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus kaustophilus</i> GBlys
Gsp-8-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> sp. 12AMOR1
Gsp-9-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> sp. A8
Gsp-10-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> sp. CAMR5420
Gsp-11-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> sp. FW23
Gsp-12-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> sp. GHH01
Gsp-13-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> sp. JF8
Gsp-14-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> sp. LC300
Gsp-15-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> sp. MAS1
Gsp-16-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> sp. T6
Gsp-17-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> sp. WSUCF1
Gsp-18-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> sp. ZGt-1
Gst-1-1 to Gst-1-5	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus stearothermophilus</i>
Gst-2-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus stearothermophilus</i> 10
Gst-3-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus stearothermophilus</i> ATCC 7953
Gsu-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus subterraneus</i> PSS2
Gth-4-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus thermodenitrificans</i> subsp. <i>thermodenitrificans</i> DSM 465
Gth-5-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus thermoglucosidans</i> TNO-09.020
Gka-3-1 to Gka-3-2	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> Geobacillus thermoleovorans group <i>Geobacillus kaustophilus</i>
Gka-4-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> Geobacillus thermoleovorans group <i>Geobacillus kaustophilus</i> NBRC 102445
Gth-6-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> Geobacillus thermoleovorans group <i>Geobacillus thermocatenulatus</i> GS-1
Gth-7-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> Geobacillus thermoleovorans group <i>Geobacillus thermoleovorans</i> B23
Gvu-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Geobacillus</i> Geobacillus thermoleovorans group <i>Geobacillus vulcani</i> PSS1
Gbo-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Gracilibacillus boracitolerans</i> JCM 21714
Gha-2-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Gracilibacillus halophilus</i> YIM-C55.5
Gla-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Gracilibacillus lacisalsi</i> DSM 19029
Hha-2-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Halalkalibacillus halophilus</i> DSM 18494
Hda-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Halobacillus dabanensis</i>
Hka-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Halobacillus karajensis</i>
Hku-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Halobacillus kuroshimensis</i> DSM 18393
Hsp-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Halobacillus</i> sp. BAB-2008
Hsp-2-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Halobacillus</i> sp. BBL2006
Htr-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Halobacillus trueperi</i>
Lbo-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus boronitolerans</i> JCM 21713 = 10a = NBRC 103108
Lfu-2-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus fusiformis</i>
Lfu-3-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus fusiformis</i> H1k
Lfu-4-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus fusiformis</i> ZB2
Lma-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus manganicus</i> DSM 26584
Lma-2-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus massiliensis</i> 4400831 = CIP 108448 = CCUG 49529
Lod-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus odysseyi</i> 34hs-1 = NBRC 100172
Lsi-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus sinduriensis</i> BLB-1 = JCM 15800
Lsp-2-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus</i> sp. A1
Lsp-3-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus</i> sp. BF-4
Lsp-4-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus</i> sp. LK3
Lsp-5-1 to Lsp-5-5	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus sphaericus</i>
Lsp-6-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus sphaericus</i> CBAM5
Lsp-7-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus sphaericus</i> KCTC 3346
Lsp-8-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus sphaericus</i> OT4b.31
Lva-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus varians</i>
Lxy-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Lysinibacillus xylanilyticus</i>
Oje-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Oceanobacillus jeddahense</i>
Oki-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Oceanobacillus kimchii</i> X50
Oma-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Oceanobacillus manasiensis</i>
Oon-1-1	Bacteria Firmicutes Bacilli Bacillales Bacillaceae	<i>Oceanobacillus oncorhynchii</i>

Opi-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Oceanobacillus picturae</i>
Osp-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Oceanobacillus</i> sp. Ndiop
Oco-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Ornithinibacillus californiensis</i>
Oco-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Ornithinibacillus contaminans</i>
Pca-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Parageobacillus caldoxylosilyticus</i> NBRC 107762
Pge-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Parageobacillus genomosp.</i> 1
Pth-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Parageobacillus thermoglucosidasius</i>
Pth-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Parageobacillus thermoglucosidasius</i> NBRC 107763
Pgl-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Paucisalibacillus globulus</i> DSM 18846
Psp-6-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Paucisalibacillus</i> sp. EB02
Pch-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Pontibacillus chungwhensis</i> BH030062
Pha-1-1 to Pha-1-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Pontibacillus halophilus</i> JSM 076056 = DSM 19796
Pli-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Pontibacillus litoralis</i> JSM 072002
Pma-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Pontibacillus marinus</i> BH030004 = DSM 16465
Pya-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Pontibacillus yanchengensis</i> Y32
Qth-1-1 to Qth-1-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Quasibacillus thermotolerans</i>
Rma-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Rubeoparvulum massiliense</i>
Sai-1-1 to Sai-1-2	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Salinibacillus aidingensis</i> MSP4
Sk0-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Salsuginibacillus kocurii</i> DSM 18087
Sha-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Sediminibacillus halophilus</i> NSP9.3
Tai-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Terribacillus aidingensis</i>
Tde-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Thalassobacillus devorans</i> MSP14
Bba-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	unclassified Bacillaceae <i>Bacillaceae bacterium</i> MTCC 10057
Val-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Virgibacillus alimentarius</i>
Vha-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Virgibacillus halodenitrificans</i> 1806
Vma-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Virgibacillus massiliensis</i>
Vpa-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Virgibacillus pantothenicus</i>
Vse-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Virgibacillus senegalensis</i>
Vsp-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Virgibacillus</i> sp. CM-4
Vsp-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Virgibacillus</i> sp. SK37
Tae-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family X.Incertae Sedis <i>Thermicanus aegyptius</i> DSM 12793
Gbe-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XI.Incertae Sedis <i>Gemella bergeriae</i> ATCC 700627
Gcu-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XI.Incertae Sedis <i>Gemella cuniculi</i> DSM 15828
Gha-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XI.Incertae Sedis <i>Gemella haemolysans</i> M341
Gmo-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XI.Incertae Sedis <i>Gemella morbillorum</i> M424
Gsa-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XI.Incertae Sedis <i>Gemella sanguinis</i> ATCC 700632
Gsa-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XI.Incertae Sedis <i>Gemella sanguinis</i> M325
Eac-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium acetylicum</i>
Eac-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium acetylicum</i> DSM 20416
Eal-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium alkaliphilum</i> 12/1
Ean-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium antarcticum</i> DSM 14480
Eau-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium aurantiacum</i> DSM 6208
Ech-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium chiriquicha</i>
Ema-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium marinum</i> DSM 16307
Eme-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium mexicanum</i>
Eox-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium oxidotolerans</i> JCM 12280
Epa-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium pavilionensis</i> RW-2
Esi-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium sibiricum</i> 7-3
Esp-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium</i> sp. 8-11-1
Esp-3-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium</i> sp. AB2
Esp-4-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium</i> sp. JLM-2
Esp-5-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium</i> sp. MH3
Esp-6-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium</i> sp. NG55
Esp-7-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium</i> sp. OS-77
Esp-8-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium</i> sp. RIT341
Esp-9-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium</i> sp. S17
Esp-10-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium</i> sp. ZOR0005
Esp-11-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium</i> sp. ZWU0009
Eun-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium undae</i> 190-11
Eun-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	Family XII.Incertae Sedis <i>Exiguobacterium undae</i> DSM 14481
Bce-148-1	Bacteria Firmicutes	Bacilli	Bacillales	Bacillales	<i>Bhargavaea cecembensis</i> DSE10
Bca-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Listeriaceae	<i>Brochothrix campestris</i> FSL F6-1037
Bth-45-1 to Bth-45-2	Bacteria Firmicutes	Bacilli	Bacillales	Listeriaceae	<i>Brochothrix thermosphacta</i> DSM 20171 = FSL F6-1036
Laq-1-1	Bacteria Firmicutes	Bacilli	Bacillales	Listeriaceae	<i>Listeria aquatica</i> FSL S10-1188
Lbo-2-1	Bacteria Firmicutes	Bacilli	Bacillales	Listeriaceae	<i>Listeria booriae</i>

Lco-1-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria cornellensis</i> FSL F6-0969
Lff-1-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria fleischmannii</i> FSL S10-1203
Lff-2-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria fleischmannii</i> LU2006-1
Lff-3-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria floridensis</i> FSL S10-1187
Lgr-1-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria grandensis</i> FSL F6-0971
Lgr-2-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria grayi</i> DSM 20601
Lgr-3-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria grayi</i> FSL F6-1183
Lin-2-1 to Lin-2-3	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria innocua</i>
Lin-3-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria innocua</i> ATCC 33091
Lin-4-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria innocua</i> FSL J1-023
Liv-3-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria ivanovii subsp. ivanovii</i>
Liv-1-1 to Liv-1-2	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria ivanovii subsp. ivanovii</i> PAM 55
Liv-4-1 to Liv-4-2	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria ivanovii subsp. londoniensis</i>
Liv-2-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria ivanovii</i> WSLC3009
Lmo-33-1 to Lmo-33-9	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i>
Lmo-34-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> 08-5578
Lmo-35-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> 4423
Lmo-36-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> 6179
Lmo-37-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> CFSAN002349
Lmo-38-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> EGD
Lmo-39-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> FSL F6-684
Lmo-40-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> FSL J1-208
Lmo-41-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> J1-220
Lmo-42-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> J1816
Lmo-44-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> Lm19860
Lmo-43-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> LM201
Lmo-45-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> Lm21045
Lmo-46-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> Lm25180
Lmo-47-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> Lm26686
Lmo-48-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> Lm.1823
Lmo-49-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> Lm.1824
Lmo-50-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> Lm.1840
Lmo-51-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> Lm.1880
Lmo-52-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> Lm.1886
Lmo-53-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> Lm.1889
Lmo-54-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> N53-1
Lmo-55-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> QOC1
Lmo-56-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> QOC2
Lmo-57-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> R479a
Lmo-72-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes serotype</i> 1/2a str. NCCP No. 15743
Lmo-73-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes serotype</i> 4b str. LL195
Lmo-74-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes serotype</i> 4bV str. LS542
Lmo-75-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes serotype</i> 4bV str. LS642
Lmo-76-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes serotype</i> 4bV str. LS643
Lmo-77-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes serotype</i> 4bV str. LS644
Lmo-78-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes serotype</i> 4bV str. LS645
Lmo-58-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SHL001
Lmo-59-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SHL002
Lmo-60-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SHL004
Lmo-61-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SHL005
Lmo-62-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SHL006
Lmo-63-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SHL007
Lmo-64-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SHL008
Lmo-65-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SHL009
Lmo-66-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SHL010
Lmo-67-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SHL011
Lmo-68-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SHL012
Lmo-69-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> SHL013
Lmo-79-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes str.</i> Scott A
Lmo-70-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> WSLC1001
Lmo-71-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria monocytogenes</i> WSLC1042
Lne-1-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria newyorkensis</i>
Lri-1-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria riparia</i> FSL S10-1204
Lro-1-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria rocourtiae</i> FSL F6-920
Lse-2-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria seeligeri</i>

Lse-3-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria seeligeri</i> FSL N1-067
Lwe-2-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria weihenstephanensis</i> FSL R9-0317
Lba-2-1	Bacteria Firmicutes Bacilli Bacillales Listeriaceae	<i>Listeria bacterium</i> FSL A5-0209
Aan-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	Aneurinibacillus group <i>Aneurinibacillus aneurinilyticus</i> ATCC 12856
Ami-1-1 to Ami-1-3	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	Aneurinibacillus group <i>Aneurinibacillus migulanus</i>
Ate-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	Aneurinibacillus group <i>Aneurinibacillus terranovensensis</i> DSM 18919
Aty-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	Aneurinibacillus group <i>Aneurinibacillus tyrosinisolvans</i>
Bag-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus agri</i> 5-2
Bag-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus agri</i> BAB-2500
Bbo-4-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus borstelensis</i>
Bbo-5-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus borstelensis</i> 3096-7
Bbo-6-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus borstelensis</i> AK1
Bbo-7-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus borstelensis cifa_chp40</i>
Bbr-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus brevis</i>
Bbr-3-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus brevis</i> FJAT-0809-GLX
Bbr-4-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus brevis</i> X23
Bfo-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus formosus</i>
Bla-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus laterosporus</i>
Bla-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus laterosporus</i> DSM 25
Bla-3-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus laterosporus</i> GI-9
Bla-4-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus laterosporus</i> LMG 15441
Bla-5-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus laterosporus</i> PE36
Bpa-4-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus panacihumi</i> W25
Bre-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus reuszeri</i>
Bsp-99-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus sp. phR</i>
Bth-46-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus thermoruber</i> 423
Bth-47-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Brevibacillus thermoruber</i> PM1
Cko-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Cohnella kolymensis</i>
Cla-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Cohnella laeviribosi</i> DSM 21336
Cth-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Cohnella thermotolerans</i> DSM 17683
Gma-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Gorillibacterium massiliense</i>
Pal-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus alginolyticus</i> DSM 5050 = NBRC 15375
Pal-3-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus algorifonticola</i>
Pal-4-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus alvei</i> A6-6i-x
Pal-5-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus alvei</i> TS-15
Pan-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus antibioticophila</i>
Pas-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus assamensis</i> DSM 18201
Pba-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus barengoltzii</i> G22
Pbe-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus beijingensis</i>
Pch-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus chitinolyticus</i> NBRC 15660
Pch-3-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus chondroitinus</i>
Pda-1-1 to Pda-1-3	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus darwinianus</i>
Peh-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus ehimensis</i> A2
Pgi-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus ginsengihumi</i> DSM 21568
Pgo-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus gorillae</i>
Pha-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus harenae</i> DSM 16969
Pla-3-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus larvae</i>
Pla-4-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus larvae</i> subsp. <i>larvae</i> DSM 25430
Pla-5-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus larvae</i> subsp. <i>larvae</i> DSM 25719
Pma-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus macerans</i>
Pma-3-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus massiliensis</i> 2301065 = DSM 16942
Pma-4-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus massiliensis</i> T7
Pmu-3-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus mucilaginosus</i> K02
Ppa-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus panacisoli</i> DSM 21345
Ppa-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus pasadenensis</i> DSM 19293
Ppe-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus peoriae</i>
Ppi-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus pini</i> JCM 16418
Ppi-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus pinihumi</i> DSM 23905 = JCM 16419
Ppo-2-1 to Ppo-2-2	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus polymyxa</i>
Ppo-3-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus polymyxa</i> 1-43
Ppo-4-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus polymyxa</i> A18
Ppo-5-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus polymyxa</i> ATCC 842
Ppo-6-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus polymyxa</i> E681
Ppo-7-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus polymyxa</i> OSY-DF
Ppo-8-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus polymyxa</i> SC2

Ppo-9-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus polymyxa</i> SQR-21
Ppo-10-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus polymyxa</i> TD94
Psa-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sanguinis</i> 2301083 = DSM 16941
Psp-7-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> 1-18
Psp-8-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> 1-49
Psp-9-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> D9
Psp-10-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> DMB20
Psp-11-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> E194
Psp-12-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> FJAT-27812
Psp-13-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> FSL H7-689
Psp-14-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> FSL H8-457
Psp-15-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> FSL R5-192
Psp-16-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> FSL R5-808
Psp-17-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> HGH0039
Psp-18-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> ICGEB2008
Psp-19-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> IHBB 10380
Psp-20-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> J14
Psp-21-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> JC66
Psp-22-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> MAEPY1
Psp-23-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> MAEPY2
Psp-24-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> P1XP2
Psp-25-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> P22
Psp-26-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> PAMC 26794
Psp-27-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> TCA20
Psp-28-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> UNC217MF
Psp-29-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> UNC451MF
Psp-30-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> UNCCL52
Psp-31-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> URHA0014
Psp-32-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> VKM B-2647
Psp-33-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus sp.</i> VT-400
Pst-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus stellifer</i>
Pta-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus taiwanensis</i> DSM 18679
Pte-2-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus terrae</i>
Pte-3-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus terrigena</i> DSM 21567
Pty-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus tyrfis</i>
Pwy-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Paenibacillus wynnii</i>
Tco-1-1	Bacteria Firmicutes Bacilli Bacillales Paenibacillaceae	<i>Thermobacillus composti</i> KWC4
Bce-149-1 to Bce-149-2	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Bhargavaea cecembensis</i>
Jal-1-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Jeotgalibacillus alimentarius</i>
Jca-1-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Jeotgalibacillus campisalis</i>
Jma-1-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Jeotgalibacillus malaysiensis</i>
Jma-2-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Jeotgalibacillus marinus</i>
Jso-1-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Jeotgalibacillus soli</i>
Khu-1-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Kurthia huakuii</i> LAM0618
Kma-1-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Kurthia massiliensis</i>
Ksp-1-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Kurthia sp.</i> Dielmo
Ksp-2-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Kurthia sp.</i> JC8E
Psp-34-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Paenisporosarcina sp.</i> HGH0030
Psp-35-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Paenisporosarcina sp.</i> TG-14
Psp-36-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Paenisporosarcina sp.</i> TG20
Pha-3-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Planococcus halocryophilus</i> Or1
Pma-5-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Planococcus massiliensis</i>
Psp-37-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Planococcus sp.</i> CAU13
Psp-38-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Planococcus sp.</i> L10.15
Psp-39-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Planococcus sp.</i> PAMC 21323
Pgl-2-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Planomicrobium glaciei</i>
Pgl-3-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Planomicrobium glaciei</i> CHR43
Sgl-1-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Sporosarcina globispora</i>
Sko-2-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Sporosarcina koreensis</i>
Sne-1-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Sporosarcina newyorkensis</i> 2681
Ssp-3-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Sporosarcina sp.</i> D27
Ssp-4-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Sporosarcina sp.</i> EUR3 2.2.2
Ssp-5-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Sporosarcina sp.</i> ZBG7A
Sur-1-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Sporosarcina ureae</i> DSM 2281
Uth-1-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Ureibacillus thermosphaericus str.</i> Thermo-BF

Var-1-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Viridibacillus arenosi</i> FSL R5-213
Var-2-1	Bacteria Firmicutes Bacilli Bacillales Planococcaceae	<i>Viridibacillus arvi</i>
Sal-1-1	Bacteria Firmicutes Bacilli Bacillales	<i>Salinicoccus albus</i> DSM 19776
Sca-4-1	Bacteria Firmicutes Bacilli Bacillales	<i>Salinicoccus carnicancrri</i> Crm
Sin-1-1	Bacteria Firmicutes Bacilli Bacillales Sporolactobacillaceae	<i>Sporolactobacillus inulinus</i> CASD
Sla-1-1	Bacteria Firmicutes Bacilli Bacillales Sporolactobacillaceae	<i>Sporolactobacillus laevolacticus</i> DSM 442
Ste-1-1	Bacteria Firmicutes Bacilli Bacillales Sporolactobacillaceae	<i>Sporolactobacillus terrae</i> DSM 11697
Ste-2-1	Bacteria Firmicutes Bacilli Bacillales Sporolactobacillaceae	<i>Sporolactobacillus terrae</i> HKM-1
Svi-1-1 to Svi-1-2	Bacteria Firmicutes Bacilli Bacillales Sporolactobacillaceae	<i>Sporolactobacillus vineae</i> DSM 21990 = SL153
Tca-1-1	Bacteria Firmicutes Bacilli Bacillales Sporolactobacillaceae	<i>Tuberibacillus calidus</i> DSM 17572
Jma-3-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Jeotgalicoccus marinus</i> DSM 19772
Jps-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Jeotgalicoccus psychrophilus</i> DSM 19085
Jsa-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Jeotgalicoccus sauidimassiliensis</i>
Nma-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Nosocomiicoccus massiliensis</i>
Sha-3-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Salinicoccus halodurans</i>
Slu-3-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Salinicoccus luteus</i> DSM 17002
Sro-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Salinicoccus roseus</i>
Sse-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Salinicoccus sediminis</i>
Ssp-6-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Salinicoccus sp.</i> YB14-2
Sag-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus agnetis</i>
Sar-2-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus argenteus</i>
Sau-79-1 to Sau-79-2	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i>
Sau-80-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 07-03450
Sau-81-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 07-03451
Sau-82-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 08-01059
Sau-83-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 08-01062
Sau-84-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 08-01084
Sau-85-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 08-01085
Sau-86-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 08-01229
Sau-87-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 08-01728
Sau-88-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 08-02906
Sau-89-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 08134-6
Sau-90-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 08139-6
Sau-91-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 08142-8
Sau-92-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 08143-5
Sau-93-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 09-00736
Sau-94-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 09S00475
Sau-95-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 09S01694
Sau-96-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1(04GN_04-02-52-07)
Sau-97-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 10S00488
Sau-98-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 10S01493
Sau-99-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1101-1 2010
Sau-100-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1101-1 2011
Sau-101-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1101-2 2010
Sau-102-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1101-2 2011
Sau-103-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 110802495
Sau-104-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1110601704
Sau-105-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1110601896
Sau-106-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1110700562
Sau-107-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1110700610
Sau-108-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1110701127
Sau-109-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1110802883
Sau-110-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1110803248
Sau-111-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1110807699
Sau-112-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1110904178
Sau-113-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1111000175
Sau-114-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1111000177
Sau-115-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1111001578
Sau-116-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1111100370
Sau-117-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1111101949
Sau-118-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1111102620
Sau-119-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1111200013
Sau-120-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1111203374
Sau-121-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1111205429
Sau-122-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus aureus</i> 1111206270

Sch-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus chromogenes</i> MU 970
Sco-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus cohnii</i> hu-01
Sco-2-1 to Sco-2-3	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus cohnii</i> subsp. <i>cohnii</i>
Sco-3-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus condimenti</i>
Sep-8-1 to Sep-8-3	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus epidermidis</i>
Sep-9-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus epidermidis</i> AG42
Sep-10-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus epidermidis</i> M0026
Sep-11-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus epidermidis</i> PM221
Sep-12-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus epidermidis</i> UC7032
Sep-13-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus epidermidis</i> VCU013
Sep-14-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus epidermidis</i> VCU014
Sep-15-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus epidermidis</i> VCU036
Sep-16-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus epidermidis</i> VCU050
Sep-17-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus epidermidis</i> VCU111
Seq-2-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus equorum</i> subsp. <i>equorum</i>
Sga-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus gallinarum</i>
Sha-4-1 to Sha-4-119	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus haemolyticus</i>
Sha-5-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus haemolyticus</i> DNF00585
Sho-3-1 to Sho-3-17	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus hominis</i>
Shy-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus hyicus</i>
Slu-4-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus lugdunensis</i> UCIM6116
Slu-5-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus lugdunensis</i> VCU148
Slu-6-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus lugdunensis</i> VCU150
Smi-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus microti</i>
Spa-1-1 to Spa-1-2	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus pasteurii</i>
Spe-1-1 to Spe-1-2	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus pettenkoferi</i>
Sps-3-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus pseudintermedius</i> E140
Ssa-2-1 to Ssa-2-3	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus saprophyticus</i>
Ssc-1-1 to Ssc-1-4	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus schleiferi</i>
Ssc-2-1 to Ssc-2-3	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus schweitzeri</i>
Ssc-3-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus sciuri</i> subsp. <i>sciuri</i>
Ssc-4-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus sciuri</i> subsp. <i>sciuri</i> Z8
Ssp-7-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus</i> sp. M0480
Ssp-8-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus</i> sp. TE8
Ssp-9-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus</i> sp. URHA0057
Ssp-10-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus</i> sp. ZWU0021
Ssu-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus succinus</i> subsp. <i>succinus</i>
Swa-2-1 to Swa-2-6	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus warneri</i>
Swa-3-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus warneri</i> Lyso 1 2011
Swa-4-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus warneri</i> Lyso 2 2011
Sxy-1-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus xylosus</i>
Sxy-2-1	Bacteria Firmicutes Bacilli Bacillales Staphylococcaceae	<i>Staphylococcus xylosus</i> DMB3-Bh1
Sau-79-1 to Sau-79-2	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i>
Sau-3758-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> 16K
Sau-3759-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> 3957
Sau-3760-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> B147830
Sau-3761-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> B40723
Sau-3762-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> B40950
Sau-3763-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> B53639
Sau-3764-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> Bmb9393
Sau-3765-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> CA-347
Sau-3766-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> CN79
Sau-3767-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> HI010
Sau-3768-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> HI010B
Sau-3769-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> HI013
Sau-3770-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> HI022
Sau-3771-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> HI049
Sau-3772-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> HI049B
Sau-3773-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> HI049C
Sau-3774-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> HI111
Sau-3775-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> HI168
Sau-3776-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> HIF003_B2N-C
Sau-3777-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> KLT6
Sau-3778-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> KT/314250
Sau-3779-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i> KT/Y21

Sau-4121-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus str.</i>	Newbould 305
Sau-4105-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	Tager 104
Sau-4104-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	TCH70
Sau-4106-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VCU006
Sau-4107-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VH60
Sau-4108-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VRS1
Sau-4109-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VRS10
Sau-4110-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VRS11a
Sau-4111-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VRS11b
Sau-4112-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VRS2
Sau-4113-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VRS3a
Sau-4114-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VRS4
Sau-4115-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VRS5
Sau-4116-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VRS6
Sau-4117-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VRS7
Sau-4118-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VRS8
Sau-4119-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	VRS9
Sau-4120-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus subsp. aureus</i>	Z172
Sau-3995-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus aureus</i>	VH221
Sca-9-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus capitis</i>	CR01
Sca-10-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus capitis</i>	QN1
Sca-11-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus capitis</i>	VCU116
Sde-1-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus delphini</i>	8086
Sep-8-1 to Sep-8-3	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	
Sep-18-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	12142587
Sep-19-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	14.1.R1.SE
Sep-20-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	APO27
Sep-21-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	APO35
Sep-22-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	AU12-03
Sep-23-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	BVS058A4
Sep-24-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	CIM28
Sep-25-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	CIM37
Sep-26-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	CIM40
Sep-27-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	E13A
Sep-28-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	FRI909
Sep-29-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	IS-250
Sep-30-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	IS-K
Sep-31-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	M0881
Sep-32-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	MC16
Sep-33-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	MC19
Sep-34-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	MC28
Sep-35-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIH04003
Sep-36-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIH04008
Sep-37-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIH05001
Sep-38-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIH05003
Sep-39-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIH05005
Sep-40-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIH051475
Sep-41-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIH051668
Sep-42-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIH06004
Sep-43-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIH08001
Sep-44-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM001
Sep-45-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM003
Sep-46-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM008
Sep-47-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM015
Sep-48-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM018
Sep-49-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM020
Sep-50-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM021
Sep-51-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM023
Sep-52-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM031
Sep-53-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM037
Sep-54-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM039
Sep-55-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM040
Sep-56-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM049
Sep-57-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM053
Sep-58-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM057

Sep-59-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM061
Sep-60-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM067
Sep-61-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM087
Sep-62-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM088
Sep-63-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	NIHLM095
Sep-64-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	Scl19
Sep-65-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	Scl22
Sep-66-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	Scl25
Sep-67-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	Scl31
Sep-68-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU028
Sep-69-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU037
Sep-70-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU041
Sep-71-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU045
Sep-72-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU065
Sep-73-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU071
Sep-74-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU081
Sep-75-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU105
Sep-76-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU109
Sep-77-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU117
Sep-78-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU118
Sep-79-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU120
Sep-80-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU123
Sep-81-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU125
Sep-82-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU126
Sep-83-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU127
Sep-84-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU128
Sep-85-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU129
Sep-86-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	VCU144
Sep-87-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	WI05
Sep-88-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus epidermidis</i>	WI09
Seq-3-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus equorum</i>	UMC-CNS-924
Sha-4-1 to Sha-4-119	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus haemolyticus</i>	
Sha-6-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus haemolyticus</i>	R1P1
Sho-5-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus hominis</i>	subsp. <i>hominis</i> ZBW5
Sho-4-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus hominis</i>	VCU122
Sin-2-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus intermedius</i>	NCTC 11048
Slu-7-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus lugdunensis</i>	ACS-027-V-Sch2
Slu-8-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus lugdunensis</i>	M23590
Slu-9-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus lugdunensis</i>	VCU139
Sma-1-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus massiliensis</i>	CCUG 55927
Sma-2-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus massiliensis</i>	S46
Spa-2-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus pasteurii</i>	SP1
Spe-2-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus pettenkoferi</i>	VCU012
Ssa-3-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus saprophyticus</i>	subsp. <i>saprophyticus</i> KACC 16562
Ssi-3-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus simulans</i>	ACS-120-V-Sch1
Ssi-4-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus simulans</i>	UMC-CNS-990
Ssp-11-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus</i>	sp. AL1
Ssp-12-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus</i>	sp. E463
Ssp-13-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus</i>	sp. EGD-HP3
Ssp-14-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus</i>	sp. HGB0015
Svi-2-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus vitulinus</i>	F1028
Swa-5-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus warneri</i>	A487
Swa-6-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus warneri</i>	SG1
Swa-7-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus warneri</i>	VCU121
Sxy-3-1	Bacteria Firmicutes Bacilli Bacillales	<i>Staphylococcus xylosus</i>	NJ
Bba-4-1	Bacteria Firmicutes Bacilli bacterium	VT-13-104	
Fso-1-1	Bacteria Firmicutes Bacilli Lactobacillales	Aerococcaceae	<i>Facklamia sourekkii</i> ATCC 700629
Aot-1-1	Bacteria Firmicutes Bacilli Lactobacillales	Carnobacteriaceae	<i>Alloiococcus otitis</i> ATCC 51267
Aph-1-1	Bacteria Firmicutes Bacilli Lactobacillales	Carnobacteriaceae	<i>Atopobacter phocae</i> ATCC BAA-285
Ata-1-1	Bacteria Firmicutes Bacilli Lactobacillales	Carnobacteriaceae	<i>Atopococcus tabaci</i> DSM 17538
Cal-1-1	Bacteria Firmicutes Bacilli Lactobacillales	Carnobacteriaceae	<i>Carnobacterium alterfunditum</i> DSM 5972
Cdi-1-1	Bacteria Firmicutes Bacilli Lactobacillales	Carnobacteriaceae	<i>Carnobacterium divergens</i> DSM 20623
Cfu-1-1	Bacteria Firmicutes Bacilli Lactobacillales	Carnobacteriaceae	<i>Carnobacterium funditum</i> DSM 5970
Cga-1-1	Bacteria Firmicutes Bacilli Lactobacillales	Carnobacteriaceae	<i>Carnobacterium gallinarum</i> DSM 4847
Cin-1-1	Bacteria Firmicutes Bacilli Lactobacillales	Carnobacteriaceae	<i>Carnobacterium inhibens</i> subsp. <i>inhibens</i> DSM 13024

Cje-1-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Carnobacterium jeotgali</i>
Cje-2-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Carnobacterium jeotgali</i> MS3
Cma-1-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Carnobacterium maltaromaticum</i>
Cma-2-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Carnobacterium maltaromaticum</i> DSM 20342
Cma-3-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Carnobacterium maltaromaticum</i> LMA28
Cmo-1-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Carnobacterium mobile</i> DSM 4848
Cpl-1-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Carnobacterium pleistocenium</i> FTR1
Csp-1-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Carnobacterium sp.</i> WN1359
Csp-2-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Carnobacterium sp.</i> WN1374
Csp-3-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Carnobacterium sp.</i> ZWU0011
Gel-1-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Granulicatella elegans</i> ATCC 700633
Gsp-19-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Granulicatella sp.</i> 572.rep1_STHE
Gsp-20-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Granulicatella sp.</i> 572.rep2_STHE
Lna-1-1	Bacteria Firmicutes Bacilli Lactobacillales Carnobacteriaceae	<i>Lacticigenium naphtae</i> DSM 19658
Bse-3-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Bavariococcus seileri</i> DSM 19936
Cma-4-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Catelliococcus marimammalium</i> M35/04/3
Eas-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus asini</i> ATCC 700915
Eav-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus avium</i>
Eav-2-1 to Eav-2-2	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus avium</i> ATCC 14025
Eca-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus caccae</i> ATCC BAA-1240
Eca-2-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus casseliflavus</i> 14-MB-W-14
Eca-3-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus casseliflavus</i> ATCC 12755
Eca-4-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus casseliflavus</i> EC20
Ece-1-1 to Ece-1-7	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus cecorum</i>
Ece-2-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus cecorum</i> DSM 20682 = ATCC 43198
Eco-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus columbae</i> DSM 7374 = ATCC 51263
Edi-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus dispar</i> ATCC 51266
Edu-1-1 to Edu-1-2	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus durans</i>
Edu-2-1 to Edu-2-2	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus durans</i> ATCC 6056
Edu-3-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus durans</i> FB129-CNAB-4
Edu-4-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus durans</i> IPLA 655
Efa-1-1 to Efa-1-87	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i>
Efa-2-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> 02-MB-BW-10
Efa-3-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> 02-MB-P-10
Efa-4-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> 06-MB-DW-09
Efa-5-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> 06-MB-S-04
Efa-6-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> 06-MB-S-10
Efa-7-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> 10244
Efa-8-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> 13-SD-W-01
Efa-9-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> 20-SD-BW-06
Efa-10-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> 20-SD-BW-08
Efa-11-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> 20.SD.W.06
Efa-12-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> 599
Efa-13-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> 918
Efa-14-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> ATCC 10100
Efa-15-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> ATCC 19433
Efa-16-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> ATCC 27275
Efa-17-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> ATCC 27959
Efa-18-1 to Efa-18-2	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> ATCC 29200
Efa-19-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> ATCC 29212
Efa-20-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> ATCC 35038
Efa-21-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> ATCC 6055
Efa-22-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> AZ19
Efa-23-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> B83616-1
Efa-24-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> BM4539
Efa-25-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> BM4654
Efa-26-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> D811610-10
Efa-27-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> DAPTO 512
Efa-28-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> DAPTO 516
Efa-29-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> DENG1
Efa-30-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> E12
Efa-47-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> Efa HS0914
Efa-48-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> EnGen0058
Efa-49-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> EnGen0059
Efa-50-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecalis</i> EnGen0060

Efa-342-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> ERV102
Efa-343-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> ERV161
Efa-344-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> ERV165
Efa-345-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> ERV168
Efa-346-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> ERV26
Efa-347-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> ERV38
Efa-348-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> ERV69
Efa-349-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> ERV99
Efa-498-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> LA4B-2
Efa-499-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> LCT-EF128
Efa-500-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> LCT-EF20
Efa-501-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> LCT-EF258
Efa-502-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> LCT-EF297
Efa-503-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> LCT-EF301
Efa-504-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> LCT-EF90
Efa-505-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> MRSN 11639
Efa-506-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> MRSN 3418
Efa-507-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> NEF1
Efa-508-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> NRRL B-2354
Efa-509-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> OC2A-1
Efa-510-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> P1123
Efa-511-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> P1137
Efa-512-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> P1139
Efa-513-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> P1140
Efa-514-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> P1190
Efa-515-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> P1986
Efa-516-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> R446
Efa-517-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> R494
Efa-518-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> R496
Efa-519-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> R497
Efa-520-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> R499
Efa-521-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> R501
Efa-522-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> S447
Efa-523-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> SB2C-2
Efa-524-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> SD1C-2
Efa-525-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> SD2A-2
Efa-526-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> SD3B-2
Efa-527-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> T110
Efa-528-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> TX0082
Efa-529-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> TX0133A
Efa-532-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> TX0133a01
Efa-533-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> TX0133a04
Efa-530-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> TX0133B
Efa-531-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> TX0133C
Efa-534-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> TX1337RF
Efa-535-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> UC10237
Efa-536-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> UC7251
Efa-537-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> UC7256
Efa-538-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> UC7267
Efa-539-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> UC8668
Efa-540-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> UC8733
Efa-541-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> V689
Efa-542-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> VRE0576
Efa-543-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> VRE1044
Efa-544-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> VRE1261
Efa-545-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> VSE1036
Efl-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus flavescens</i> ATCC 49996
Ega-1-1 to Ega-1-2	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus gallinarum</i>
Egi-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus gilvus</i> ATCC BAA-350
Eha-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus haemoperoxidus</i> ATCC BAA-382
Ehi-1-1 to Ehi-1-2	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus hirae</i>
Ehi-2-1 to Ehi-2-2	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus hirae</i> ATCC 9790
Eit-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus italicus</i> DSM 15952
Ema-2-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus malodoratus</i> ATCC 43197
Ema-3-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus massiliensis</i>

Emo-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus moraviensis</i> ATCC BAA-383
Emu-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus mundtii</i> ATCC 882
Emu-4-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus mundtii</i> cr1/656
Emu-2-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus mundtii</i> CRL35
Emu-3-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus mundtii</i> QU 25
Epa-2-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus pallens</i> ATCC BAA-351
Eph-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus phoeniculicola</i> ATCC BAA-412
Era-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus raffinosus</i> ATCC 49464
Esa-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus saccharolyticus</i> 30_1
Esa-2-1 to Esa-2-2	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus saccharolyticus</i> ATCC 43076
Esp-12-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus</i> sp. 1140_ESPC
Esp-13-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus</i> sp. 255_ESPC
Esp-14-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus</i> sp. C1
Esp-15-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus</i> sp. GMD3E
Esp-16-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus</i> sp. GMD5E
Esp-17-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus</i> sp. TR
Esu-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus sulfureus</i> ATCC 49903
Evi-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Enterococcus villorum</i> ATCC 700913
Mpl-1-1 to Mpl-1-11	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Melissococcus plutonius</i>
Tmu-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Tetragenococcus muriaticus</i> 3MR10-3
Tmu-2-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Tetragenococcus muriaticus</i> DSM 15685
Tmu-3-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Tetragenococcus muriaticus</i> PMC-11-5
Vlu-1-1	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae	<i>Vagococcus lutrae</i> LBD1
Lac-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus acidophilus</i>
Lac-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus acidophilus</i> CFH
Lac-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus acidophilus</i> CIP 76.13
Lac-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus acidophilus</i> CIRM-BIA 442
Lac-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus acidophilus</i> CIRM-BIA 445
Lac-6-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus acidophilus</i> DSM 20079 = JCM 1132 = NBRC 13951
Lac-7-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus acidophilus</i> DSM 20242
Lac-8-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus acidophilus</i> DSM 9126
Lac-9-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus acidophilus</i> La-14
Lag-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus agilis</i>
Lan-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus animalis</i>
Lan-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus animalis</i> KCTC 3501 = DSM 20602
Lap-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus apidemi</i>
Lap-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus apidemi</i> DSM 16634 = JCM 16172
Lbr-1-1 to Lbr-1-6	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus brevis</i>
Lbr-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus brevis</i> AG48
Lbr-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus brevis</i> ATCC 14869 = DSM 20054
Lbr-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus brevis</i> EW
Lbr-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus brevis</i> KB290
Lca-1-1 to Lca-1-6	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i>
Lca-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> 12A
Lca-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> 21/1
Lca-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> 32G
Lca-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> 5b
Lca-6-1 to Lca-6-2	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> A2-362
Lca-7-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> CRF28
Lca-9-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> Lc-10
Lca-10-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> LcA
Lca-11-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> LcY
Lca-8-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> LOCK919
Lca-12-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> Lpc-37
Lca-13-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> M36
Lca-18-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> str. Zhang
Lca-19-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> subsp. <i>casei</i> ATCC 393
Lca-14-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> T71499
Lca-15-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> UCD174
Lca-16-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> UW1
Lca-17-1 to Lca-17-2	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> UW4
Lce-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus ceti</i> DSM 22408
Lco-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus composti</i> DSM 18527 = JCM 14202
Lcr-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus crispatus</i> EM-LC1
Lcr-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus crispatus</i> FB049-03

Lcr-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus crispatus</i> FB077-07
Lcr-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus crispatus</i> MV-1A-US
Lcr-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus crispatus</i> SJ-3C-US
Lcu-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus curiciae</i>
Leq-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus equi</i> DPC 6820
Leq-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus equi</i> DSM 15833 = JCM 10991
Lfa-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus fabifermentans</i> DSM 21115
Lfa-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus fabifermentans</i> T30PCM01
Lfa-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus farciminis</i> KCTC 3681 = DSM 20184
Lfa-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus farraginis</i> DSM 18382 = JCM 14108
Lfe-1-1 to Lfe-1-4	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus fermentum</i>
Lfe-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus fermentum</i> 3872
Lfe-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus fermentum</i> F-6
Lfe-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus fermentum</i> FTDC8312
Lfe-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus fermentum</i> L930BB
Lfe-6-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus fermentum</i> Lf1
Lfe-7-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus fermentum</i> MTCC 8711
Lfe-8-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus fermentum</i> NB-22
Lga-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus gallinarum</i> DSM 10532 = JCM 2011
Lga-2-1 to Lga-2-6	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus gasseri</i>
Lga-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus gasseri</i> 130918
Lga-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus gasseri</i> 2016
Lga-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus gasseri</i> ATCC 33323 = JCM 1131
Lga-6-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus gasseri</i> CECT 5714
Lga-7-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus gasseri</i> JV-V03
Lga-8-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus gasseri</i> K7
Lga-9-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus gasseri</i> SJ-9E-US
Lga-10-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus gasseri</i> SV-16A-US
Lgi-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus ginsenosidimutans</i>
Lha-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus hamsteri</i> DSM 5661 = JCM 6256
Lha-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus harbinensis</i> DSM 16991
Lha-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus hayakitensis</i> DSM 18933 = JCM 14209
Lhe-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus heilongjiangensis</i>
Lhe-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus helsingborgensis</i>
Lhe-3-1 to Lhe-3-2	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus helveticus</i>
Lhe-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus helveticus</i> CIRM-BIA 101
Lhe-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus helveticus</i> CIRM-BIA 103
Lhe-6-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus helveticus</i> CIRM-BIA 104
Lhe-7-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus helveticus</i> CIRM-BIA 951
Lhe-8-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus helveticus</i> CIRM-BIA 953
Lhe-9-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus helveticus</i> CNRZ32
Lhe-10-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus helveticus</i> H9
Lhe-11-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus herbarum</i>
Lho-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus hokkaidonensis</i> JCM 18461
Lin-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> ATCC 55195
Lin-6-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus ingluviei</i> str. Autruche 4
Ljo-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus johnsonii</i> 16
Ljo-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus johnsonii</i> N6.2
Ljo-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus johnsonii</i> pf01
Lke-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus kefiranofaciens</i> subsp. <i>kefiranofaciens</i> DSM 5016 = JCM 6985
Lki-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus kimbladii</i>
Lki-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus kisonensis</i> F0435
Lki-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus kitatonis</i> DSM 16761 = JCM 1039
Lko-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus koreensis</i>
Lku-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus kullabergensis</i>
Lku-2-1 to Lku-2-2	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus kunkeei</i>
Lku-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus kunkeei</i> EFB6
Lma-3-1 to Lma-3-2	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus mali</i> KCTC 3596 = DSM 20444
Lme-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus melliventris</i>
Lmu-1-1 to Lmu-1-2	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus mucosae</i>
Lmu-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus mucosae</i> LM1
Lmu-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus murinus</i> ASF361
Lna-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus namurensis</i> str. Chizuka 01
Lno-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus nanshanensis</i> DSM 19682 = JCM 14932 = NBRC 107160
Lor-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus oris</i> F0423

Lor-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus oryzae</i> JCM 18671
Lot-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus otakiensis</i> JCM 15040
Lpa-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus panis</i> DSM 6035
Lpa-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus parabrevis</i> ATCC 53295
Lpa-3-1 to Lpa-3-2	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i>
Lpa-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> COM0101
Lpa-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> N1115
Lpa-6-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> NRIC 0644
Lpa-7-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> NRIC 1917
Lpa-8-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> NRIC 1981
Lpa-9-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> 8700:2
Lpa-10-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> CNCM I-2877
Lpa-11-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> CNCM I-4270
Lpa-12-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> CNCM I-4649
Lpa-13-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> JCM 8130
Lpa-14-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp120
Lpa-15-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp122
Lpa-16-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp125
Lpa-17-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp14
Lpa-18-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp17
Lpa-19-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp189
Lpa-20-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp219
Lpa-21-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp22
Lpa-22-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp221
Lpa-23-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp223
Lpa-24-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp225
Lpa-25-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp226
Lpa-26-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp227
Lpa-27-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp228
Lpa-28-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp229
Lpa-29-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp230
Lpa-30-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp37
Lpa-31-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp43
Lpa-32-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp46
Lpa-33-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp49
Lpa-34-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp7
Lpa-35-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp70
Lpa-36-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> Lpp74
Lpa-37-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>tolerans</i> Lpl14
Lpa-38-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>tolerans</i> Lpl7
Lpa-39-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus parafarraginis</i> F0439
Lpa-40-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paralimentarius</i> DSM 13238 = JCM 10415
Lpa-41-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus paraplantarum</i>
Lpe-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus pentosus</i>
Lpe-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus pentosus</i> KCA1
Lpl-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i>
Lpl-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> 16
Lpl-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> 19L3
Lpl-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> 2165
Lpl-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> 4.3
Lpl-6-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> AY01
Lpl-7-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> CMPG5300
Lpl-8-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> EGD-AQ4
Lpl-9-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> IPLA88
Lpl-10-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> LP91
Lpl-14-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> subsp. <i>plantarum</i>
Lpl-15-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> subsp. <i>plantarum</i> ATCC 14917
Lpl-16-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> subsp. <i>plantarum</i> ATCC 14917 = JCM 1149 = CGMCC 1.2437
Lpl-17-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> subsp. <i>plantarum</i> NC8
Lpl-18-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> subsp. <i>plantarum</i> P-8
Lpl-11-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> UCMA 3037
Lpl-12-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> WJL
Lpl-13-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> ZJ316
Lpo-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus pobuzhii</i> E100301
Lre-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i>

Lre-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i> ATCC 53608
Lre-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i> I5007
Lre-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i> lpuph
Lre-6-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i> mlc3
Lre-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i> TD1
Lrh-1-1 to Lrh-1-28	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i>
Lrh-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> 51B
Lrh-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> ATCC 21052
Lrh-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> CASL
Lrh-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> CRL1505
Lrh-6-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> E800
Lrh-7-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> K32
Lrh-8-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> L31
Lrh-9-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> L34
Lrh-10-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> L35
Lrh-11-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> LOCK900
Lrh-12-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> LOCK908
Lrh-13-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> LR231
Lrh-14-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> LRHMDP2
Lrh-15-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> LRHMDP3
Lrh-16-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> PEL5
Lrh-17-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> PEL6
Lrh-18-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> R0011
Lro-2-1 to Lro-2-2	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus rossiae</i> DSM 15814
Lru-1-1 to Lru-1-2	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus ruminis</i>
Lru-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus ruminis</i> ATCC 25644
Lru-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus ruminis</i> DPC 6832
Lru-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus ruminis</i> S23
Lsa-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus saerimneri</i> 30a
Lsa-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus saerimneri</i> DSM 16049
Lsa-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus salivarius</i>
Lsa-7-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus salivarius</i> cp400
Lsa-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus salivarius</i> GJ-24
Lsa-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus salivarius</i> NIAS840
Lsa-6-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus salivarius</i> SMXD51
Lsa-8-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus salivarius</i> str. Ren
Lsh-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus shenzhenensis</i> LY-73
Lsp-9-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus</i> sp. 7.1.47FAA
Lsp-10-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus</i> sp. ASF360
Lsp-11-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus</i> sp. FMNP02
Lsp-12-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus</i> sp. OTU4228
Lsp-13-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus</i> sp. wkB10
Lsp-14-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus</i> sp. wkB8
Lsp-15-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus spicheri</i>
Lsu-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus sucicola</i> DSM 21376 = JCM 15457
Lvi-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus vini</i> JP7.8.9
Lwa-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Lactobacillus wasatchensis</i>
Pac-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Pediococcus acidilactici</i> D3
Pac-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Pediococcus</i> <i>Pediococcus</i> acidilactici group <i>Pediococcus acidilactici</i> AGR20
Pac-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Pediococcus acidilactici</i> MA18/5M
Pda-2-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Pediococcus damnosus</i> LMG 28219
Plo-1-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Pediococcus lohii</i> NGRI 0510Q
Ppe-3-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Pediococcus pentosaceus</i> CGMCC 7049
Ppe-4-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Pediococcus pentosaceus</i> IE-3
Ppe-5-1	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae	<i>Pediococcus pentosaceus</i> SL4
Lci-1-1	Bacteria Firmicutes Bacilli Lactobacillales	<i>Leuconostoc citreum</i> LBAE C10
Lci-2-1	Bacteria Firmicutes Bacilli Lactobacillales	<i>Leuconostoc citreum</i> LBAE C11
Lci-3-1	Bacteria Firmicutes Bacilli Lactobacillales	<i>Leuconostoc citreum</i> LBAE E16
Lci-4-1 to Lci-4-3	Bacteria Firmicutes Bacilli Lactobacillales	Leuconostocaceae <i>Leuconostoc citreum</i>
Wci-1-1 to Wci-1-3	Bacteria Firmicutes Bacilli Lactobacillales	Leuconostocaceae <i>Weissella cibaria</i>
Whe-1-1	Bacteria Firmicutes Bacilli Lactobacillales	Leuconostocaceae <i>Weissella hellemica</i>
Spn-1-1 to Spn-1-8	Bacteria Firmicutes Bacilli Lactobacillales	Streptococcaceae <i>Streptococcus pneumoniae</i>
Ssp-15-1	Bacteria Firmicutes Bacilli Lactobacillales	Streptococcaceae <i>Streptococcus</i> sp. 263_SSPC
Wko-1-1	Bacteria Firmicutes Bacilli Lactobacillales	<i>Weissella koreensis</i> KCTC 3621
Bma-8-1	Bacteria Firmicutes Clostridia Clostridiales	Clostridiaceae <i>Beduini massiliensis</i>

Cul-1-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium ultunense</i> Esp
Cba-1-1	Bacteria Firmicutes Clostridia <i>Clostridiales bacterium</i> VE202-01
Esp-18-1	Bacteria Firmicutes Clostridia Clostridiales Eubacteriaceae <i>Eubacterium</i> sp. 3_1_31
Bsp-100-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae <i>Butyrivibrio</i> sp. MC2021
Lba-3-1	Bacteria Firmicutes Clostridia Clostridiales <i>Lachnospiraceae bacterium</i> A2
Cmi-1-1	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae <i>Catenibacterium mitsuokai</i> DSM 15897
Csp-4-1	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae <i>Clostridium spiroforme</i> DSM 1552
Edo-1-1	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae <i>Eubacterium dolichum</i> DSM 3991
Hfi-1-1	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae <i>Holdemania filiformis</i> DSM 12042
Tsp-1-1	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae <i>Turicibacter</i> sp. HGF1
Tsp-2-1	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae <i>Turicibacter</i> sp. PC909
Ast-1-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales Erysipelotrichaceae <i>Allobaculum stercoricanis</i> DSM 13633
CSt-1-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales Erysipelotrichaceae <i>Candidatus</i> Stoquefichus massiliensis AP9
CSt-2-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales Erysipelotrichaceae <i>Candidatus</i> Stoquefichus sp. SB1
Csp-5-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales Erysipelotrichaceae <i>Coprobacillus</i> sp. 29_1
Csp-6-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales Erysipelotrichaceae <i>Coprobacillus</i> sp. 8_1_38FAA
Csp-7-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales Erysipelotrichaceae <i>Coprobacillus</i> sp. D6
Eca-5-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales Erysipelotrichaceae <i>Eggerthia cateniformis</i> OT 569 = DSM 20559
[sa-1-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales Erysipelotrichaceae <i>Erysipelatoclostridium</i> [Clostridium] saccharogumia DSM 17460
Eba-1-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales <i>Erysipelotrichaceae bacterium</i> 5_2_54FAA
Hma-1-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales Erysipelotrichaceae <i>Holdemania massiliensis</i> AP2
Kvi-1-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales Erysipelotrichaceae <i>Kandleria vitulina</i> DSM 20405
Kvi-2-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales Erysipelotrichaceae <i>Kandleria vitulina</i> MC3001
Kvi-3-1	Bacteria Firmicutes Erysipelotrichia Erysipelotrichales Erysipelotrichaceae <i>Kandleria vitulina</i> WCE2011
Fba-1-1	Bacteria Firmicutes <i>bacterium</i> M10-2
Cma-5-1	Bacteria Firmicutes Lactobacillales Carnobacteriaceae <i>Carnobacterium maltaromaticum</i> ATCC 35586
Csp-8-1	Bacteria Firmicutes Lactobacillales Carnobacteriaceae <i>Carnobacterium</i> sp. 17-4
Csp-9-1	Bacteria Firmicutes Lactobacillales Carnobacteriaceae <i>Carnobacterium</i> sp. AT7
Gad-1-1	Bacteria Firmicutes Lactobacillales Carnobacteriaceae <i>Granulicatella adiacens</i> ATCC 49175
Eca-6-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus casseliflavus</i> EC10
Eca-7-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus casseliflavus</i> EC30
Efa-546-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> AR01/DG
Efa-18-1 to Efa-18-2	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> ATCC 29200
Efa-547-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> ATCC 4200
Efa-548-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> CH188
Efa-549-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> D32
Efa-550-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> D6
Efa-551-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> DS5
Efa-552-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> E1Sol
Efa-553-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> Fly1
Efa-554-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> HH22
Efa-555-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> HIP11704
Efa-556-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> JH1
Efa-557-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> Merz96
Efa-558-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> OG1RF
Efa-559-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> PC1.1
Efa-560-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> R712
Efa-561-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> S613
Efa-562-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> T1
Efa-563-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> T11
Efa-564-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> T2
Efa-565-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> T3
Efa-566-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> T8
Efa-567-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> TUSoD Efi1
Efa-568-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> TX0104
Efa-569-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> TX0855
Efa-570-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> TX1322
Efa-571-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> TX2134
Efa-572-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> TX4248
Efa-309-1 to Efa-309-3	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> V583
Efa-573-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecalis</i> X98
Efa-574-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecium</i> 1,141,733
Efa-575-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecium</i> 1,230,933
Efa-576-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecium</i> 1,231,408
Efa-577-1	Bacteria Firmicutes Lactobacillales Enterococcaceae <i>Enterococcus faecium</i> 1,231,410

Efa-578-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> 1,231,501
Efa-579-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> 1,231,502
Efa-580-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> Aus0004
Efa-581-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> Com12
Efa-582-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> Com15
Efa-583-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> D344SRF
Efa-584-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> DO
Efa-585-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> E1039
Efa-586-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> E1071
Efa-587-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> E1162
Efa-588-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> E1636
Efa-589-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> E1679
Efa-590-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> E980
Efa-591-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> PC4.1
Efa-592-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> TC 6
Efa-593-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> TX1330
Efa-594-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus faecium</i> U0317
Ega-2-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus gallinarum</i> EG2
Ehi-2-1 to Ehi-2-2	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus hirae</i> ATCC 9790
Esp-19-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus</i> sp. GMD1E
Esp-20-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus</i> sp. GMD2E
Esp-21-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Enterococcus</i> sp. GMD4E
Mpl-2-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Melissococcus plutonius</i> ATCC 35311
Mpl-3-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Melissococcus plutonius</i> DAT561
Tha-1-1	Bacteria Firmicutes Lactobacillales Enterococcaceae	<i>Tetragenococcus halophilus</i> NBRC 12172
Lac-10-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus acidipiscis</i> KCTC 13900
Lac-11-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus acidophilus</i> 30SC
Lac-12-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus acidophilus</i> ATCC 4796
Lac-13-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus acidophilus</i> NCFM
Lam-1-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus amylolyticus</i> DSM 11664
Lam-2-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus amylovorus</i> GRL 1112
Lam-3-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus amylovorus</i> GRL1118
Lan-3-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus antri</i> DSM 16041
Lbr-6-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus brevis</i> ATCC 367
Lbr-7-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus brevis</i> subsp. <i>gravesensis</i> ATCC 27305
Lbu-1-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus buchneri</i> ATCC 11577
Lbu-2-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus buchneri</i> CD034
Lbu-3-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus buchneri</i> NRRL B-30929
Lca-20-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> ATCC 334
Lca-21-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> BD-II
Lca-22-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> BL23
Lca-23-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> LC2W
Lca-24-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus casei</i> W56
Lco-3-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus coleohominis</i> 101-4-CHN
Lcr-6-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus crispatus</i> 125-2-CHN
Lcr-7-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus crispatus</i> 214-1
Lcr-8-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus crispatus</i> CTV-05
Lcr-9-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus crispatus</i> JV-V01
Lcr-10-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus crispatus</i> MV-3A-US
Lcr-11-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus crispatus</i> ST1
Lfe-9-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus fermentum</i> 28-3-CHN
Lfe-10-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus fermentum</i> ATCC 14931
Lfe-11-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus fermentum</i> CECT 5716
Lfe-12-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus fermentum</i> IFO 3956
Lga-11-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus gasseri</i> 202-4
Lga-12-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus gasseri</i> ATCC 33323
Lga-13-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus gastricus</i> PS3
Lgi-2-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus gigeriorum</i> CRBIP 24.85
Lhe-12-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus helveticus</i> DPC 4571
Lhe-13-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus helveticus</i> DSM 20075
Lhe-14-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus helveticus</i> H10
Lhe-15-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus helveticus</i> R0052
Lhi-1-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus hilgardii</i> ATCC 8290
Lho-2-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus hominis</i> CRBIP 24.179
Lin-7-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> AB-1

Lin-8-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> DSM 13335
Lin-13-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> LactinV 01V1-a
Lin-14-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> LactinV 03V1-b
Lin-15-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> LactinV 09V1-c
Lin-16-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> LactinV 11V1-d
Lin-9-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> LEAF 2052A-d
Lin-10-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> LEAF 2053A-b
Lin-11-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> LEAF 2062A-h1
Lin-12-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> LEAF 3008A-a
Lin-17-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> SPIN 1401G
Lin-18-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> SPIN 2503V10-D
Lin-19-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> UPII 143-D
Lin-20-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus iners</i> UPII 60-B
Ljo-4-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus johnsonii</i> ATCC 33200
Ljo-5-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus johnsonii</i> DPC 6026
Ljo-6-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus johnsonii</i> F19785
Ljo-7-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus johnsonii</i> NCC 533
Lke-2-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus kefranofaciens</i> ZW3
Lma-4-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus malefermentans</i> KCTC 3548
Lma-3-1 to Lma-3-2	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus mali</i> KCTC 3596 = DSM 20444
Lor-3-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus oris</i> PB013-T2-3
Lpa-42-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> ATCC 25302
Lpl-19-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> JDM1
Lpl-21-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> subsp. <i>plantarum</i> ST-III
Lpl-20-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus plantarum</i> WCFS1
Lre-7-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i> 100-23
Lre-8-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i> CF48-3A
Lre-9-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i> DSM 20016
Lre-10-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i> JCM 1112
Lre-11-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i> MM2-3
Lre-12-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i> MM4-1A
Lre-13-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus reuteri</i> SD2112
Lrh-19-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> ATCC 8530
Lrh-20-1 to Lrh-20-2	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> GG
Lrh-21-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> HN001
Lrh-23-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> Lc 705
Lrh-22-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus rhamnosus</i> LMS2-1
Lru-5-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus ruminis</i> ATCC 27782
Lru-6-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus ruminis</i> SPM0211
Lsa-9-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus salivarius</i> ACS-116-V-Col5a
Lsa-10-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus salivarius</i> ATCC 11741
Lsa-11-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus salivarius</i> CECT 5713
Lsa-12-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus salivarius</i> UCC118
Lsa-13-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus sanfranciscensis</i> TMW 1.1304
Lsu-2-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus suebicus</i> KCTC 3549
Lul-1-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus ultunensis</i> DSM 16047
Lva-2-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus vaginalis</i> ATCC 49540
Lve-1-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus versmoldensis</i> KCTC 3814
Lvi-2-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus vini</i> DSM 20605
Lze-1-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Lactobacillus zeae</i> KCTC 3804
Pac-4-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Pediococcus acidilactici</i> 7.4
Pac-5-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Pediococcus acidilactici</i> DSM 20284
Pcl-1-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Pediococcus claussenii</i> ATCC BAA-344
Ppe-6-1	Bacteria Firmicutes Lactobacillales Lactobacillaceae	<i>Pediococcus pentosaceus</i> ATCC 25745
Lca-25-1	Bacteria Firmicutes Lactobacillales	<i>Leuconostoc carnosum</i> JB16
Lci-5-1	Bacteria Firmicutes Lactobacillales	<i>Leuconostoc citreum</i> KM20
Lki-4-1	Bacteria Firmicutes Lactobacillales	<i>Leuconostoc kimchii</i> IMSNU 11154
Lsp-16-1	Bacteria Firmicutes Lactobacillales	<i>Leuconostoc</i> sp. C2
Wci-2-1	Bacteria Firmicutes Lactobacillales	<i>Weissella cibaria</i> KACC 11862
Wko-2-1	Bacteria Firmicutes Lactobacillales	<i>Weissella koreensis</i> KACC 15510
Hco-1-1	Bacteria Haloplasmatales Haloplasmataceae	<i>Haloplasma contractile</i> SSD-17B
Ecl-1-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae	Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae</i>
Psp-40-1	Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Pseudomonadaceae	<i>Pseudomonas</i> sp. EGD-AK9
Xca-1-1	Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae	<i>Xanthomonas campestris</i> pv. <i>musacearum</i> NCPPB 2005
Xca-2-1	Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae	<i>Xanthomonas campestris</i> pv. <i>musacearum</i> NCPPB 4379

Xca-3-1	Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae	<i>Xanthomonas campestris pv. musacearum</i> NCPPB 4380
Xca-4-1	Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae	<i>Xanthomonas campestris pv. musacearum</i> NCPPB 4392
Xca-5-1	Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae	<i>Xanthomonas campestris pv. musacearum</i> NCPPB 4394
Xor-1-1	Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae	<i>Xanthomonas oryzae pv. oryzae</i> PXO99A
Xva-1-1	Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae	<i>Xanthomonas vasicola pv. vasculorum</i> NCPPB 1326
Xva-2-1	Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae	<i>Xanthomonas vasicola pv. vasculorum</i> NCPPB 1381
Xva-3-1	Bacteria Proteobacteria Gammaproteobacteria Xanthomonadales Xanthomonadaceae	<i>Xanthomonas vasicola pv. vasculorum</i> NCPPB 206
Agr-1-1	Bacteria Tenericutes Mollicutes Acholeplasmatales Acholeplasmataceae	<i>Acholeplasma granularum</i> ATCC 19168
Aoc-1-1	Bacteria Tenericutes Mollicutes Acholeplasmatales Acholeplasmataceae	<i>Acholeplasma oculi</i>
env-1 to env-1514	environmental samples	

11.2 Notes

Superscript numbers are used to annotate any L31-Firmicutes RNA that has special characteristics (described below). These numeric annotations will be used in Sections 11.3 and 11.5. The meaning of the numbers are as follows.

¹ A different alignment would have a somewhat stronger hairpin, but would somewhat lose conserved nucleotides. It's unclear which alignment of this se-

quence is better.

11.3 Gene contexts

Each L31-Firmicutes RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one L31-Firmicutes RNA are assigned a color; other domains are gray. Information about these conserved

domains is given in Section 11.4. The accession of the sequence containing each L31-Firmicutes RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accessions refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each L31-Firmicutes RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 11.1. (Superscript numbers refer to annotations listed in Section 11.2)

abbrev.	Seq. accession	5′ at	3′ at	genes
env-1	SL_5KL_010_SED_10059915	-	521	483 RNA→ hypo→
env-2	2200881906	-	21321	21291 RNA→ HXXSHH (pfam07586)→
env-3	BISONR_C7447	+	805	839 RNA→ hypo→
env-4	JGI24025J20009_10001343	+	4419	4451 RNA→ ← REC (smart00448)Trans_reg_C (smart00862)OmpR (COG0745)
env-5	JGI24724J26744_10982735	+	117	149 RNA→ ← Trans_reg_C (smart00862)trans_reg_C (cd00383)Trans_reg_C (pfam00486)
env-6	JGI994J12354_10174172	+	602	631 RNA→ int (PHA02601)→
Cmo-1-1	NZ_JQMR01000001.1	-	1464079	1464047 RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-7	ASHM260b_GM9OZ8V02GSY54	+	254	292 RNA→ hypo→
env-8	08_19_CONTROL_DNA_scaffold7482.7	-	8235	8202 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ast-1-1	NZ_KB913034.1	-	1959703	1959670 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-9	JGI24713J26584_10168935	+	112	146 RNA→ PurM (COG0150)PRK05385 (PRK05385)→
env-10	SL_1KL_011_SED_10415685	-	130	99 RNA→ hypo→
env-11	SL_9KL_010_SED_10025487	+	283	314 RNA→ dnaG (PRK05667)USP_Like (cd00293)→
env-12	SL_7KL_010_BRINE_10007095	+	279	310 RNA→ dnaG (PRK05667)USP_Like (cd00293)→
env-13	HCF14C_2.1.1_newblercontig17407	+	809	842 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-14	HCF12C_35575	-	214	181	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-15	scaffold5088_2.V1.CD-11	-	8404	8367	RNA → hypo →
env-16	RUMENNODE_3996658.1	-	12142	12105	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RhaT (COG0697) → ArcA (COG2235)PRK01388 (PRK01388) → PRK02102 (PRK02102)ArgF (COG0078) → MetG (COG0143)PRK11893 (PRK11893) →
env-17	topACOD_FV90NF401C3W26	-	154	126	RNA → hypo →
env-18	SRS016335_C5226868	-	1031	997	RNA → ←hypo
env-19	RUMENNODE_2334914_25000	-	39974	39943	RNA → hypo →
env-20	JGI12341J12878_1000327	-	8875	8843	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-21	JGI12298J13902_1000429	+	6154	6186	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-22	JGI12298J13902_1007687	+	173	205	RNA → ←hypo
Cde-1-1	NZ_KB912881.1	-	64384	64352	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-27-1	NZ_BBIW01000023.1	-	4864	4830	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lsp-1-1	NZ_AGAV01000016.1	+	19061	19094	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Xor-1-1	NC_010717.2	+	5213900	5213934	RNA → HSDR_N (pfam04313)HSDR_N_2 (pfam13588) →
Xva-3-1	NZ_AKBM01000002.1	+	13187	13221	RNA → HSDR_N (pfam04313)HSDR_N_2 (pfam13588) →
Xva-2-1	NZ_KB373231.1	-	59457	59423	RNA → HSDR_N (pfam04313)HSDR_N_2 (pfam13588) →
Xca-5-1	NZ_KB373047.1	+	93162	93196	RNA → HSDR_N (pfam04313)HSDR_N_2 (pfam13588) →
Xca-2-1	NZ_KB372855.1	-	57748	57714	RNA → HSDR_N (pfam04313)HSDR_N_2 (pfam13588) →
Xca-4-1	NZ_KB373012.1	-	34001	33967	RNA → HSDR_N (pfam04313)HSDR_N_2 (pfam13588) →
Xca-3-1	NZ_KB372889.1	-	57694	57660	RNA → HSDR_N (pfam04313)HSDR_N_2 (pfam13588) →
Xva-1-1	NZ_KB373142.1	-	59417	59383	RNA → HSDR_N (pfam04313)HSDR_N_2 (pfam13588) →
Xca-1-1	NZ_AKBE01000040.1	+	196	230	RNA → HSDR_N (pfam04313)HSDR_N_2 (pfam13588) →
env-23	JGI24721J26819_10249650	+	591	632	RNA → hypo →
env-24	JGI24721J44947_10005316	+	2145	2186	RNA → vWFA (cd00198) → hypo → hypo → AAA (smart00382)SpoVK (COG0464)CDC48 (TIGR01243) → NHT_00031 (TIGR04181)AHBA_syn (cd00616) → CesT (pfam05932)YbjN (pfam10722)FtsA (pfam14450) →
env-25	2016923541	+	557	598	RNA → hypo →
env-26	JGI20130J15003_1005706	+	4068	4109	RNA → vWFA (cd00198) → hypo → hypo → AAA (smart00382)SpoVK (COG0464)CDC48 (TIGR01243) →
env-27	JGI20130J15133_1005706	+	4068	4109	RNA → vWFA (cd00198) → hypo → hypo → AAA (smart00382)SpoVK (COG0464)CDC48 (TIGR01243) →
env-28	SRS015985_C1514630	+	276	309	RNA → rpmE (PRK00019)rpmE2 (PRK01678)L31 (TIGR00105)Ribosomal_L31 (pfam01197) →
env-29	SRS018443_C3751049	+	219	252	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-30	Subgingival_plaque_LANL_C11194098	-	247	214	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-31	SRS011152_C4313074	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-32	SRS013533_C5440500	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-33	SRS013723_C3407064	-	247	214	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-34	SRS013945_WUGC_scaffold_2673	-	368	335	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-35	SRS013949_C3416715	+	114	147	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-36	SRS014690_C1785810	+	89	122	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-37	SRS015044_WUGC_scaffold_37694	-	255	222	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-38	SRS015470_C3354823	+	848	881	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-39	SRS015755_C1607169	+	161	194	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-40	SRS015803_C2579404	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-41	SRS015947_WUGC_scaffold_25971	-	575	542	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-42	SRS015989_C2127565	+	350	383	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-43	SRS016200_C2226629	-	247	214	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-44	SRS016360_Baylor_scaffold_38732	-	406	373	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-45	SRS017139_Baylor_scaffold_102199	+	117	150	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-46	SRS017227_Baylor_scaffold_86694	+	354	387	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-47	SRS018573_C2469306	-	223	190	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-48	SRS018665_C3678853	+	290	323	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-49	SRS019029_C3197161	+	182	215	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-50	SRS019225_C1506735	+	84	117	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-51	SRS019387_C1744036	-	62	29	RNA →

env-52	SRS019591_WUGC_scaffold_36465	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-53	SRS019980_C3067094	+	4283	4316	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-54	SRS020226_C3471976	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-55	SRS020340_Baylor_scaffold_9891	+	1969	2002	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-56	SRS022725_LANL_scaffold_22307	+	709	742	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-57	SRS023358_C3441410	+	264	297	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-58	SRS023595_C6937803	-	247	214	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-59	SRS023938_Baylor_scaffold_23028	-	14585	14552	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-60	SRS024021_C2019462	+	712	745	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-61	SRS024355_C4162431	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-62	SRS024447_LANL_scaffold_46821	+	2480	2513	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-63	SRS024649_C3520887	-	189	156	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-64	SRS043772_C1744867	+	214	247	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-65	SRS045197_C3371889	-	247	214	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-66	SRS045313_C1320319	-	229	196	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-67	SRS047100_C2004330	+	101	134	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-68	SRS047113_C5226893	+	186	219	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-69	SRS051930_C3120842	-	245	212	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-70	SRS051941_C3883544	+	96	129	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-71	SRS052876_C2340555	+	941	974	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-72	SRS063215_C2148515	-	183	150	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Gsp-20-1	NZ_JVBN01000045.1	-	69014	68981	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Gsp-19-1	NZ_JVBO01000013.1	-	39564	39531	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Gad-1-1	NZ_GG694015.1	+	59433	59466	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-73	Palatine_Tonsils_LANL_C6167790	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-74	SRS011086_C2691210	-	244	211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-75	SRS014692_C1451880	-	214	181	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-76	SRS016740_Baylor_scaffold_14962	-	415	382	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-77	SRS017076_Baylor_scaffold_28499	+	465	498	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-78	SRS043239_C1988916	+	172	205	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-79	SRS062878_LANL_scaffold_15918	+	3373	3406	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-80	SRS064329_LANL_scaffold_17894	+	446	479	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-81	SRS075404_C3523540	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-82	Throat_LANL_C5742344	+	171	204	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-83	Contig123769.1	-	237	204	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-84	SRS011243_C2055318	+	1110	1143	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-85	SRS011306_Baylor_scaffold_38054	-	414	381	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-86	SRS013164_C2328665	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-87	SRS013234_Baylor_scaffold_22883	+	896	929	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-88	SRS013502_C2111881	-	244	211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-89	SRS013818_C2698254	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-90	SRS013879_C2728982	+	120	153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-91	SRS013947_C1595611	+	309	342	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-92	SRS013948_C1493527	+	350	383	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-93	SRS014124_WUGC_scaffold_3490	-	2369	2336	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-94	SRS014271_C2843132	+	377	410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-95	SRS014573_WUGC_scaffold_16789	-	448	415	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-96	SRS014684_WUGC_scaffold_42590	+	348	381	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-97	SRS014888_C3007517	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-98	SRS015038_C1904815	+	588	621	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-99	SRS015057_C3337539	+	168	201	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-100	SRS015272_C3470509	-	244	211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-101	SRS015762.WUGC_scaffold_27214	-	414	381	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-102	SRS015893.C2300612	+	271	304	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-103	SRS015941.C3418565	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-104	SRS016002.WUGC_scaffold_52168	+	5156	5189	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-105	SRS016037.C1931603	-	241	208	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-106	SRS016086.WUGC_scaffold_11609	+	396	429	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-107	SRS016225.C2969359	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-108	SRS016319.WUGC_scaffold_44666	+	293	326	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-109	SRS016342.Baylor_scaffold_17442	+	168	201	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-110	SRS016501.LANL_scaffold_6156	-	521	488	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-111	SRS016529.Baylor_scaffold_15023	+	368	401	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-112	SRS016569.C2383218	-	244	211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-113	SRS017209.Baylor_scaffold_58383	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-114	SRS017439.Baylor_scaffold_37092	+	293	326	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-115	SRS017713.C3280511	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-116	SRS018145.Baylor_scaffold_27253	+	848	881	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-117	SRS018300.C3233287	-	226	193	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-118	SRS018357.Baylor_scaffold_42581	+	135	168	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-119	SRS018439.Baylor_scaffold_58366	+	168	201	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-120	SRS018739.C3514291	+	146	179	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-121	SRS018969.C2923925	+	368	401	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-122	SRS019026.C1883714	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-123	SRS019027.C1899173	+	198	231	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-124	SRS019045.C2664370	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-125	SRS019126.WUGC_scaffold_19544	-	439	406	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-126	SRS019127.C1552693	+	350	383	RNA →
env-127	SRS019219.WUGC_scaffold_61972	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-128	SRS019327.C2685469	+	198	231	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-129	SRS019389.C2182350	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-130	SRS019607.WUGC_scaffold_1340	-	345	312	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-131	SRS019894.WUGC_scaffold_51316	+	473	506	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-132	SRS019974.Baylor_scaffold_9326	+	378	411	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-133	SRS020334.Baylor_scaffold_42522	+	168	201	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-134	SRS020856.Baylor_scaffold_27114	-	452	419	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-135	SRS021496.Baylor_scaffold_12527	+	531	564	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-136	SRS021954.Baylor_scaffold_16680	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-137	SRS022077.Baylor_scaffold_52875	+	492	525	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-138	SRS022143.WUGC_scaffold_12069	-	406	373	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-139	SRS022621.Baylor_scaffold_80034	-	244	211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-140	SRS023352.C4538890	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-141	SRS023557.Baylor_scaffold_4832	-	347	314	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-142	SRS023617.C3098017	-	244	211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-143	SRS023835.Baylor_scaffold_35031	+	515	548	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-144	SRS023926.C2767560	-	244	211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-145	SRS023958.Baylor_scaffold_30996	+	299	332	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-146	SRS024015.Baylor_scaffold_18521	+	1374	1407	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-147	SRS024081.C2462482	-	244	211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-148	SRS024138.C2623584	+	135	168	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-149	SRS024277.LANL_scaffold_21966	+	716	749	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-150	SRS024375.C2363158	+	113	146	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-151	SRS024580.LANL_scaffold_27268	+	614	647	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-152	SRS024637.LANL_scaffold_24099	-	453	420	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-153	SRS042643.C3064743	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-154	SRS042910.C5549436	+	368	401	RNA →
env-155	SRS044486.C2150381	+	120	153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-156	SRS045127.LANL_scaffold_25618	+	1248	1281	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-157	SRS045715.LANL_scaffold_6690	+	225	258	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-158	SRS048411.C6826029	-	214	181	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-159	SRS048791.LANL_scaffold_26361	+	823	856	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-160	SRS049147.LANL_scaffold_33494	+	596	629	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-161	SRS049389.C4709343	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-162	SRS050029.C709046	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-163	SRS050244.LANL_scaffold_4525	-	353	320	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-164	SRS050669.C2638407	+	270	303	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-165	SRS052227.LANL_scaffold_51410	+	309	342	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-166	SRS053854.LANL_scaffold_49593	+	459	492	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-167	SRS054687.LANL_scaffold_44325	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-168	SRS055426.C3289545	+	1043	1076	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-169	SRS056323.LANL_scaffold_27832	+	486	519	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-170	SRS056622.LANL_scaffold_18765	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-171	SRS057355.C2278348	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-172	SRS057539.LANL_scaffold_15960	+	387	420	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-173	SRS057692.LANL_scaffold_21980	+	239	272	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-174	SRS057791.C3542302	+	165	198	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-175	SRS058336.LANL_scaffold_61029	-	4000	3967	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-176	SRS062540.LANL_scaffold_56123	+	317	350	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-177	SRS062544.C2960130	+	486	519	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-178	SRS062761.C4244060	+	411	444	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-179	SRS063193.LANL_scaffold_32922	+	1090	1123	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-180	SRS063287.LANL_scaffold_18471	+	811	844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-181	SRS064423.LANL_scaffold_27210	+	531	564	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-182	SRS064774.C2766594	-	244	211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-183	SRS065278.LANL_scaffold_64678	+	186	219	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-184	SRS077736.C1812325	+	270	303	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Cma-1-1	NZ_JUUF01000442.1	-	723	690	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssp-15-1	NZ_JVNU01000059.1	-	61303	61270	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-185	SRS044373.WUGC_scaffold_4958	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-186	SRS011140.Baylor_scaffold_5150	-	244	211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-187	SRS012279.Baylor_scaffold_62508	+	168	201	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-188	SRS014470.WUGC_scaffold_48055	+	444	477	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-189	SRS014689.C1291827	+	299	332	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-190	SRS015209.WUGC_scaffold_29650	+	114	147	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-191	SRS015395.WUGC_scaffold_12946	-	404	371	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-192	SRS015434.C5741645	+	153	186	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-193	SRS015537.WUGC_scaffold_11805	+	344	377	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-194	SRS015644.C1875711	+	241	274	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-195	SRS015797.C2623703	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-196	SRS017533.Baylor_scaffold_28274	+	359	392	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-197	SRS017808.Baylor_scaffold_52314	+	368	401	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-198	SRS018591.WUGC_scaffold_33617	+	344	377	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-199	SRS018791.C2231902	+	258	291	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-200	SRS020220.Baylor_scaffold_50081	-	244	211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-201	SRS022530.C2101381	+	194	227	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-202	SRS022719.C2849471	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-203	SRS024318.LANL_scaffold_10943	-	268	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-204	SRS024441.LANL_scaffold_48378	+	368	401	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-205	SRS042131.C2145624	+	93	126	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-206	SRS047210.WUGC_scaffold_39313	+	344	377	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-207	SRS053603.LANL_scaffold_60119	+	368	401	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-208	SRS063288.LANL_scaffold_41825	-	431	398	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
env-209	SRS011126.C4392817	+	93	126	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-210	SRS016092.WUGC_scaffold_23228	+	983	1016	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-211	SRS022536.LANL_scaffold_79011	-	827	794	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-212	SRS065099.LANL_scaffold_8242	+	652	685	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-213	SRS051791.LANL_scaffold_16929	+	1106	1139	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eas-1-1	NZ_KB946293.1	+	500548	500580	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-214	JGI12273J12029_10202314	+	41	80	RNA → ← hypo
Pch-2-1	NZ_BBJT01000019.1	+	57434	57468	RNA → ← hypo
Psp-3-1	NZ_AFDH01000010.1	+	58110	58144	RNA → ← hypo
Psp-17-1	NZ_KE150412.1	-	2575869	2575835	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Wci-1-1	NZ_JWHV01000015.1	+	4485	4517	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Wci-1-2	NZ_JWHU01000017.1	-	4782	4750	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-215	BS_KBA_SWE02_21m_10495365	-	109	79	RNA → rpmE (PRK00528)rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-216	08_07_GOS_DNA_scaffold115360_2	-	274	241	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-217	08_19_CONTROL_DNA_scaffold125820_3	-	76	43	RNA →
env-218	4491412.3.NODE.32910	-	173	140	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-219	JGI24709J26583_10035806	+	1098	1132	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) →
env-220	JGI24707J26582_10000007	+	1235	1269	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-221	JGI24708J26588_10003174	-	10819	10785	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-222	JGI24710J26742_10050102	-	660	626	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-223	JGI24500J29687_10037880	+	135	169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-224	JGI24711J26586_10152175	+	278	312	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-225	AUXO011483282.1	-	168	141	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-226	AUXO010436543.1	+	860	887	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Epa-2-1	NZ_KB946300.1	+	1021113	1021145	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-227	JGI24025J20009_10344154	-	59	26	RNA →
env-228	BARV01035863.1	+	366	399	RNA → hypo →
env-229	UnmappedStool_Broad_scaffold_766897	+	949	975	RNA → AprE (COG1404)T7SS_mycosin (TIGR03921) →
env-230	longitudinal_143_760	-	43663	43630	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-231	longitudinal_144_2080	-	43746	43713	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-232	longitudinal_145_864	-	2639	2606	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-1-1	NZ_JXNV01000006.1	+	54157	54190	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-17-1	NZ_AQVS01000053.1	+	10357	10324	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-33-1	NZ_ANKJ01000022.1	+	2648	2681	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-29-1	NZ_ANKY01000024.1	+	53357	53390	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-14-1	NZ_ANMK01000192.1	-	3633	3600	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-24-1	NZ_ANMM01000002.1	-	44657	44624	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-32-1	NZ_ANMJ01000006.1	+	1533	1566	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-25-1	NZ_ANMN01000105.1	-	46066	46033	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-37-1	NZ_ANKB01000003.1	-	44594	44561	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-36-1	NZ_ANJU01000008.1	+	58114	58147	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-27-1	NZ_ANKA01000008.1	-	29182	29149	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-38-1	NZ_ANKV01000009.1	-	44491	44458	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Lpa-15-1	NZ_ANKW01000003.1	+	99166	99199	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-23-1	NZ_ANML01000015.1	+	50153	50186	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-16-1	NZ_ANKM01000001.1	-	46054	46021	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-19-1	NZ_ANJY01000018.1	-	13430	13397	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-21-1	NZ_ANMI01000231.1	+	4976	5009	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-18-1	NZ_ANMH01000022.1	+	1835	1868	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-31-1	NZ_ANKI01000072.1	+	10689	10722	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-35-1	NZ_ANLF01000101.1	+	3217	3250	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-20-1	NZ_ANJS01000007.1	+	49686	49719	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-10-1	NZ_ANLE01000428.1	-	11217	11184	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-12-1	NZ_ANKH01000172.1	-	1356	1323	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-30-1	NZ_ANKG01000146.1	+	1496	1529	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-28-1	NZ_ANJT01000272.1	+	1638	1671	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-17-1	NZ_ANJZ01000255.1	+	27968	28001	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-34-1	NZ_ANJV01000073.1	-	302	269	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-22-1	NZ_ANKF01000041.1	+	18918	18951	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-11-1	NZ_ANJX01000256.1	-	27031	26998	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-26-1	NZ_ANKK01000559.1	+	21036	21069	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-6-1	NZ_BAYM01000151.1	-	43683	43650	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-7-1	NZ_BAYN01000089.1	+	23335	23368	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-8-1	NZ_BAYO01000435.1	-	618	585	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-5-1	NZ_AUYM01000001.1	+	51678	51711	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-1-2	NZ_JVUB01000117.1	+	92912	92945	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-1-3	NZ_JVUA01000053.1	-	246	213	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-1-4	NZ_JUJQW01000038.1	+	57117	57150	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-12-1	NZ_AFYU01000056.1	-	16249	16216	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-14-1	NZ_AFYU01000041.1	-	44459	44426	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-15-1	NZ_AFYQ01000094.1	-	7962	7929	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-16-1	NZ_AFYR01000102.1	-	44152	44119	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-17-2	NZ_AFYS01000052.1	-	106073	106040	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-9-1	NZ_AFYT01000048.1	-	11682	11649	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-13-1	NZ_AFYO01000057.1	-	34209	34176	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-3-1	NZ_AFYK01000043.1	-	38236	38203	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-4-1	NZ_BAGT01000089.1	-	46077	46044	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-20-1	NC_008526.1	-	2550073	2550040	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-42-1	NZ_GG670156.1	+	291360	291393	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-11-1	NZ_CM001848.2	-	2654316	2654283	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-22-1	NC_010999.1	-	2690859	2690826	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-21-1	NC_017474.1	-	2681824	2681791	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-23-1	NC_017473.1	-	2650937	2650904	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-3-1	NZ_CP012187.1	-	2514242	2514209	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-24-1	NC_018641.1	-	2687463	2687430	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-8-1	NC_021721.1	-	2731500	2731467	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-9-1	NC_022112.1	-	2544386	2544353	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-5-1	NZ_CP007122.1	-	2486141	2486108	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-13-1	NZ_AP012541.1	-	2658289	2658256	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-18-1	NC_014334.2	-	2478752	2478719	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-2-1	NZ_CP006690.1	-	2512933	2512900	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-10-1	NZ_CM001861.1	-	2680824	2680791	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-3-2	NZ_CP012148.1	-	2678238	2678205	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-4-1	NZ_AFYL01000034.1	-	39968	39935	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-6-1	NZ_AFYM01000082.1	-	5581	5548	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Lca-7-1	NZ_AFYN01000040.1	-	56503	56470	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-6-2	NZ_AZOE01000015.1	-	5466	5433	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lze-1-1	NZ_BACQ01000037.1	+	45109	45142	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-1-5	NZ_LCUN01000013.1	+	753391	753424	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lsp-11-1	NZ_KN714896.1	+	1114375	1114408	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-19-1	NZ_AP012544.1	-	2516623	2516590	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-14-1	NZ_AMQW01000012.1	-	9617	9584	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-15-1	NZ_AMQX01000009.1	+	73746	73779	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-1	NZ_JUWG01000100.1	-	9704	9671	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-2	NZ_JUWQ01000064.1	+	8431	8464	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-233	longitudinal_146_787	+	90575	90608	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-21-1	NZ_ABWJ01000022.1	-	40553	40520	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-3	NZ_LFNB01000004.1	-	40563	40530	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-4	NZ_JUIL01000391.1	+	6444	6477	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-5	NZ_JVPR01000084.1	+	1525	1558	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-6	NZ_JVQV01000076.1	+	3853	3886	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-7	NZ_JVIZ01000364.1	-	40597	40564	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-8	NZ_JULF01000226.1	-	3136	3103	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-9	NZ_JPZB01000036.1	-	4961	4928	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-16-1	NZ_JDFQ01000007.1	+	73438	73471	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-17-1	NZ_JDFR01000003.1	-	40564	40531	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-6-1	NZ_JDRW01000008.1	+	93238	93271	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-20-1	NC_013198.1	-	2611055	2611022	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-20-2	NC_017482.1	-	2606025	2605992	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-10	NZ_JTDC01000034.1	+	23421	23454	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-11	NZ_JWHC01000058.1	-	565	532	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-12	NZ_JYCS01000044.1	+	1501	1534	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-5-1	NZ_ATBI01000016.1	-	42313	42280	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-13	NZ_LAZE01000069.1	-	88154	88121	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-14	NZ_JUIH01000135.1	-	7237	7204	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-15	NZ_LFNA01000007.1	-	565	532	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-16	NZ_JUII01000291.1	-	7276	7243	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-17	NZ_JUIK01000056.1	-	6917	6884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-18	NZ_JVLT01000012.1	+	180026	180059	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-19	NZ_JVDP01000093.1	+	4098	4065	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-20	NZ_JVCX01000037.1	-	27316	27349	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-21	NZ_JUTS01000037.1	+	27414	27447	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-22	NZ_JUPX01000230.1	+	1814	1847	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-23	NZ_JUTB01000107.1	+	26945	26978	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-24	NZ_JUPA01000162.1	-	40691	40658	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-25	NZ_JUMP01000096.1	-	3386	3353	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-26	NZ_JUON01000171.1	+	1814	1847	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-27	NZ_JUM001000067.1	-	9622	9589	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-1-28	NZ_JUKV01000061.1	-	3386	3353	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-18-1	NZ_AGKC01000002.1	-	40627	40594	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-8-1	NZ_AYTQ01000044.1	-	40961	40928	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-2-1	NZ_JMSI01000003.1	+	364620	364653	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-7-1	NZ_JNNV01000002.1	+	523226	523259	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-13-1	NZ_AZHJ01000147.1	-	296	263	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-4-1	NZ_JH159058.1	+	1505	1538	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-3-1	NZ_JH379496.1	+	1535	1568	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-23-1	NC_013199.1	-	2590593	2590560	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Lrh-19-1	NC_017491.1	-	2582498	2582465	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-12-1	NC_021725.1	-	2608939	2608906	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-11-1	NC_021723.1	-	2514116	2514083	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-22-1	NZ_GG692961.1	+	684435	684468	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-10-1	NZ_AYTP01000042.1	+	63172	63205	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lrh-9-1	NZ_AYTR01000028.1	+	40856	40823	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-1-6	NZ_JUPZ01000004.1	+	21466	21499	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Fba-1-1	NZ_KE159698.1	-	41156	41122	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK07681 (PRK07681)AspB (COG0436) → hypo
env-234	UnmappedStool_Broad_scaffold_36047	+	3764	3797	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-235	SRS017521_C2731538	-	110	77	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-236	SRS019601_WUGC_scaffold_47824	-	1213	1180	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-18-1	NZ_JH594450.1	+	256315	256348	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eba-1-1	NZ_KI391958.1	+	308940	308973	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-237	AUXO015079216.1	-	64	31	RNA → hypo →
env-238	AUXO018658602.1	+	131	164	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-239	SRS049318_C6167461	-	259	226	RNA → PRK05452 (PRK05452)Rubredoxin (pfam00301) →
env-240	JGI24724J26744_10023391	+	2361	2388	RNA → hypo →
env-241	3300000052_087558	+	1786	1819	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
Pwy-1-1	NZ_JQCR01000002.1	-	1896394	1896362	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-41-1	NZ_LIGF01000001.1	+	2484836	2484867	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-242	3300001580_10921771	+	174	205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-243	3300001580_11398849	+	190	221	RNA →
env-244	2227341862	-	257	226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-245	JGI994J12354_10052525	+	1979	2010	RNA → ← hypo
env-246	KGL_S1_ANT02_95m.c10164418	-	454	421	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Cal-1-1	NZ_JQLG01000004.1	+	1333377	1333410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-247	KGL_S1_ANT01_95m.c10000058	+	18408	18441	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-248	KGL_S2_ANT05_2345m.c1001626	-	5035	5002	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Cpl-1-1	NZ_JLQ01000002.1	-	2377756	2377723	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
Csp-1-1	NC_022606.1	+	216680	216713	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Cin-1-1	NZ_JQIV01000006.1	+	1981645	1981678	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Csp-9-1	NZ_ABHH01000004.1	-	75193	75160	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Cje-1-1	NZ_JEMH01000028.1	+	73321	73354	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Cje-2-1	NZ_JQNF01000010.1	+	922204	922237	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Pas-1-1	NZ_AULU01000019.1	+	60564	60597	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-249	AUXO012865815.1	-	7672	7641	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → U3_snoRNA_assoc (pfam08297) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → MreB_like (cd10225)PRK13930 (PRK13930) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → LytTR (smart00850)LytTR (pfam04397) →
env-250	RUMENNODE_2681326.1	+	10151	10184	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-251	2204978118	-	261	228	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-252	2157636633	-	261	228	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbu-2-1	NC_018610.1	-	1624612	1624579	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Tca-1-1	NZ_AUMM01000004.1	+	100153	100187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sin-1-1	NZ_AFVQ02000220.1	-	17111	17077	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sla-1-1	NZ_AWTC01000005.1	-	157176	157144	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Svi-1-2	NZ_KB899046.1	-	55946	55912	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Svi-1-1	NZ_BAEY01000002.1	-	55800	55766	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ste-2-1	NZ_JAQS01000032.1	+	2004	2038	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → Tdk (COG1435)PRK04296 (PRK04296)
Ste-1-1	NZ_JFZC01000099.1	+	3894	3928	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → Tdk (COG1435)PRK04296 (PRK04296)
Pma-3-1	NZ_KB898207.1	+	5632	5598	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pma-4-1	NZ_ASSE01000237.1	+	58736	58770	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ppa-1-1	NZ_AUFO01000034.1	-	5491	5457	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Hco-1-1	NZ_AFNU02000004.1	+	304522	304555	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-4-1	NZ_LDNY01000001.1	+	240696	240729	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → NhaP (COG0025)PRK05326 (PRK05326) →
Esp-1-1	NC_012673.1	-	1311255	1311222	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → NhaP (COG0025)PRK05326 (PRK05326) →
Esp-6-1	NZ_JPOD01000003.1	+	360593	360626	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → NhaP (COG0025)PRK05326 (PRK05326) →
Ema-1-1	NZ_KK211189.1	+	798722	798755	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → NhaP (COG0025)PRK05326 (PRK05326) →
Eme-1-1	NZ_JQGI01000001.1	-	1863165	1863132	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → NhaP (COG0025)PRK05326 (PRK05326) →
Esp-2-1	NZ_ATKK01000002.1	-	493876	493843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-10-1	NZ_JTLB01000028.1	-	13345	13312	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-3-1	NZ_JNAA01000057.1	-	81113	81080	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eal-1-1	NZ_JJMW01000013.1	+	23661	23694	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eau-1-1	NZ_JNIQ01000001.1	+	873212	873245	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ech-1-1	NZ_JNIP01000001.1	+	361382	361419	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Epa-1-1	NZ_ATCL01000014.1	+	231351	231388	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-9-1	NZ_ASXD01000010.1	-	15774	15737	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → NhaP (COG0025)PRK05326 (PRK05326) →
env-253	3300000558_10315482	-	274	246	Tdk (COG1435)PRK04296 (PRK04296) →
Lba-3-1	NZ_KE159636.1	-	2955335	2955279	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
					RNA → ArgC (COG0002)argC (PRK00436) → ArgC (COG0002) →
					RimI (COG0456)Acetyltransf.7 (pfam13508) → argJ (PRK05388)ArgJ (pfam01960) → hypo →
					PRK00942 (PRK00942)AAK_NAGK-C (cd04250) →
env-254	JGI24712J26585_10086008	-	716	686	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-255	JGI24711J26586_10149403	-	518	488	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-256	JGI24710J26742_10010214	-	6368	6338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
					TadA (COG0590)MafB19-deam (pfam14437) → hypo → PRK10351 (PRK10351)ACPS (pfam01648) → hypo →
					Peptidase_S9_N (pfam02897) → TktA (COG0021)PRK05899 (PRK05899) →
					MnmG (COG0445)PRK05192 (PRK05192) →
env-257	JGI24501J29690_1009900	+	30	60	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
					TadA (COG0590)MafB19-deam (pfam14437) → hypo → pantethn_trn (TIGR00556)ACPS (pfam01648) →
env-258	JGI24709J26583_10005562	-	7770	7740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
					TadA (COG0590)MafB19-deam (pfam14437) → hypo → PRK10351 (PRK10351)ACPS (pfam01648) → hypo →
					Peptidase_S9_N (pfam02897) → TktA (COG0021)PRK05899 (PRK05899) →
					MnmG (COG0445)PRK05192 (PRK05192) → RsmG (COG0357)gidB (PRK00107) →
env-259	JGI24710J26742_10005602	-	43	13	RNA →
env-260	JGI24500J29687_10005571	+	1219	1249	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
					TadA (COG0590)MafB19-deam (pfam14437) →
env-261	JGI24501J29690_1029221	+	1220	1250	RNA →
env-262	JGI24710J26742_10016493	+	1755	1785	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
					TadA (COG0590)MafB19-deam (pfam14437) → hypo → PRK10351 (PRK10351)ACPS (pfam01648) → hypo →
					Peptidase_S9_N (pfam02897) →
env-263	JGI24500J29687_10031739	+	4985	5015	RNA →
env-264	JGI24502J29692_10005043	+	3736	3766	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-265	JGI24501J29690_1033374	+	4316	4346	RNA →
env-266	JGI24503J29689_10039384	+	6502	6532	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-267	AUXO014528965.1	+	1985	2017	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-268	IMNBL1_c0363154	+	140	173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lki-4-1	NC_014136.1	+	1067907	1067938	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lsp-16-1	NC_015734.1	-	1357217	1357186	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Gel-1-1	NZ_KI391971.1	-	1673422	1673389	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-269	SRS043422_C2569170	-	275	242	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-270	Keratinized_gingiva.LANL_C5703483	-	63	30	RNA →
env-271	SRS011310_C881309	+	999	1032	RNA →
env-272	SRS014687_WUGC_scaffold_8481	+	7722	7755	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-273	SRS017025_Baylor_scaffold_6778	-	376	343	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-274	SRS019329_WUGC_scaffold_4099	+	368	401	RNA →
env-275	SRS022532.LANL_scaffold_5089	-	4704	4671	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-276	SRS045049.C1523482	+	219	252	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-277	SRS045262.C1292262	-	269	236	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-278	SRS046686.C925134	+	3676	3709	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-279	SRS063272.LANL_scaffold_6091	+	2727	2760	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-280	SRS024281.C971068	+	203	236	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-281	SRS015040.WUGC_scaffold_8734	+	814	847	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-282	SRS057022.LANL_scaffold_6226	-	269	236	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-283	SRS064809.C825416	-	269	236	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-284	SRS062878.LANL_scaffold_75258	+	1643	1676	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-285	SRS013946.WUGC_scaffold_12274	+	714	747	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-286	SRS019125.C601743	+	481	514	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-287	SRS013506.C1062755	+	32	65	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-288	SRS017215.C2571075	-	275	242	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-289	SRS019976.C721550	-	269	236	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-290	JGI994J12354_10282062	-	254	221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-291	AUXO015979915.1	+	3013	3043	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lsa-13-1	NC_015978.1	+	397684	397715	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Cla-1-1	NZ_KB899855.1	-	6693	6660	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-292	JGI26057J44791_1087402	-	384	351	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cth-2-1	NZ_AUCP01000036.1	-	6324	6291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-293	2200552946	-	269	235	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-294	SRS043422.LANL_scaffold_14382	-	926	891	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-295	SRS013946.WUGC_scaffold_5190	+	2187	2222	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-296	SRS019125.C619186	-	154	119	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-297	SRS019591.WUGC_scaffold_32512	+	94	129	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-298	SRS042984.C4030266	-	687	652	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Gmo-1-1	NZ_GL622607.1	-	253537	253502	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-299	SRS013723.C3219578	-	291	256	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-300	SRS047265.WUGC_scaffold_11943	+	10	45	RNA → hypo →
Spa-1-1	NZ_JUOB01000065.1	+	14924	14959	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-301	SRS024017.C910720	+	74	109	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-302	SRS017088.Baylor_scaffold_355	-	773	738	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-303	SRS011086.WUGC_scaffold_19008	-	3516	3481	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-304	SRS062878.LANL_scaffold_75449	+	78	113	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-305	SRS064329.LANL_scaffold_50995	-	917	882	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-306	SRS075404.C3430783	-	262	227	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-307	Contig7283290.1	+	2435	2470	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) →
env-308	Tongue_dor.WUGI_scaffold_7283291	+	2435	2470	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) →
env-309	SRS011140.Baylor_scaffold_32790	+	1053	1088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-310	SRS011306.Baylor_scaffold_64442	-	2134	2099	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → hypo →
env-311	SRS013164.Baylor_scaffold_712	-	2890	2855	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-312	SRS013502.C2198940	+	2237	2272	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-313	SRS013879.WUGC_scaffold_47221	+	203	238	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) →
env-314	SRS013947.C1620328	-	850	815	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-315	SRS013948.C1539802	+	2096	2131	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-316	SRS014124.WUGC_scaffold_51107	-	1607	1572	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → PCRf (smart00937)PCRf (pfam03462) →

env-317	SRS014271_C2958958	+	1617	1652	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) →
env-318	SRS014470_C3747072	+	118	153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PCRf (smart00937)PrfA (COG0216) →
env-319	SRS014573_WUGC_scaffold_12834	+	2379	2414	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-320	SRS014684_WUGC_scaffold_38221	+	2822	2857	RNA →
env-321	SRS014888_WUGC_scaffold_15364	-	262	227	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-322	SRS015038_C1778554	+	200	235	RNA →
env-323	SRS015057_C3433924	-	538	503	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-324	SRS015209_C1830245	+	66	101	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-325	SRS015395_C2370059	+	417	452	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-326	SRS015644_WUGC_scaffold_3189	-	3443	3408	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-327	SRS015762_WUGC_scaffold_41049	+	1448	1483	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-328	SRS015893_C2246048	+	233	268	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-329	SRS015941_WUGC_scaffold_75574	-	3643	3608	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-330	SRS016002_C2451425	-	191	156	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-331	SRS016037_WUGC_scaffold_43287	+	2263	2298	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PCRf (smart00937)PrfA (COG0216) →
env-332	SRS016319_C4011283	+	1508	1543	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-333	SRS016501_LANL_scaffold_17609	+	16039	16074	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)Methyltransf_25 (pfam13649) → HemK (COG2890)PRK09328 (PRK09328) →
env-334	SRS016529_Baylor_scaffold_10943	-	3202	3167	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-335	SRS016569_Baylor_scaffold_31963	+	118	153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-336	SRS017533_Baylor_scaffold_37499	-	805	770	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-337	SRS017713_C3328455	+	417	452	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-338	SRS018300_Baylor_scaffold_22706	+	2963	2998	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-339	SRS018357_C3945649	-	294	259	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-340	SRS018591_WUGC_scaffold_4474	+	2628	2663	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → hypo →
env-341	SRS018739_C3708741	-	3712	3677	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-342	SRS018969_C2941119	-	810	775	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-343	SRS019022_WUGC_scaffold_46130	+	7621	7656	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → hypo →
env-344	SRS019045_WUGC_scaffold_60915	+	699	734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) →
env-345	SRS019120_C1292577	-	263	228	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-346	SRS019219_WUGC_scaffold_73816	-	1354	1319	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PCRf (smart00937)PrfA (COG0216) →
env-347	SRS019327_WUGC_scaffold_24797	-	2643	2608	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PCRf (smart00937)RF-1 (pfam00472)PCRf (pfam03462) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-348	SRS019389_C2216180	-	368	333	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-349	SRS019607_C2754939	+	1076	1111	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PCRf (smart00937)PrfA (COG0216) →
env-350	SRS019894_C3902787	+	118	153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-351	SRS019974_Baylor_scaffold_14514	-	187	152	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-352	SRS020334_C2666501	-	1354	1319	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PCRf (smart00937)PrfA (COG0216) →
env-353	SRS020856_C2525502	+	118	153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-354	SRS022077_Baylor_scaffold_56764	-	2255	2220	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → hypo →
env-355	SRS022530_LANL_scaffold_14562	-	5660	5625	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-356	SRS022719_LANL_scaffold_70646	+	27983	28018	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-357	SRS023557_Baylor_scaffold_14708	+	229	264	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-358	SRS023617_Baylor_scaffold_71319	-	3925	3890	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-359	SRS024015_Baylor_scaffold_40979	-	1229	1194	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) →
env-360	SRS024081_LANL_scaffold_2024	+	46179	46214	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-361	SRS024277_LANL_scaffold_37737	-	2929	2894	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-362	SRS024375_LANL_scaffold_1816	-	937	902	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-363	SRS024580_C3090129	-	224	189	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-364	SRS042131_WUGC_scaffold_29424	+	4098	4133	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-365	SRS042643_C3133050	+	468	503	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-366	SRS042910_C5598748	+	491	526	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-367	SRS043663_LANL_scaffold_3211	+	5442	5477	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) →
env-368	SRS044662_LANL_scaffold_39333	+	2021	2056	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-369	SRS045127_LANL_scaffold_35833	+	349	384	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-370	SRS045715_LANL_scaffold_77986	-	3368	3333	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-371	SRS047210_C3329896	+	1570	1605	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-372	SRS048411_C6946699	-	702	667	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-373	SRS048791_C3209121	+	266	301	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-374	SRS049147_C4027824	-	262	227	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-375	SRS049389_C4719865	-	154	119	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-376	SRS050244_LANL_scaffold_70126	+	6532	6567	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PCRf (smart00937)PrfA (COG0216) →
env-377	SRS050669_LANL_scaffold_8194	-	943	908	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-378	SRS051791_LANL_scaffold_43760	+	9622	9657	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-379	SRS052227_LANL_scaffold_52022	-	2929	2894	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-380	SRS054687_C3486600	+	417	452	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-381	SRS055426_LANL_scaffold_55091	-	2268	2233	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → hypo →
env-382	SRS056622_LANL_scaffold_45323	+	692	727	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-383	SRS057205_LANL_scaffold_27098	+	2436	2471	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-384	SRS057539_LANL_scaffold_62110	+	203	238	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-385	SRS057791_LANL_scaffold_34993	+	1095	1130	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-386	SRS058336_C1967939	-	245	210	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-387	SRS062544_C2916403	+	186	221	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-388	SRS062761_LANL_scaffold_51063	-	2240	2205	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → hypo →
env-389	SRS063193_LANL_scaffold_65781	+	1299	1334	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → hypo →

env-390	SRS063288_C2613515	-	1918	1883	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) → PrfA (COG0216) prfA (PRK00591) →
env-391	SRS064423_LANL_scaffold_69154	-	1354	1319	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) → PCRf (smart00937) PrfA (COG0216) →
env-392	SRS064774_C2890698	-	627	592	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) →
env-393	SRS065278_C2548946	+	1202	1237	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-394	SRS077736_LANL_scaffold_17623	+	229	264	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) Methyltransf_25 (pfam13649) →
Gsa-2-1	NZ_ACRY02000001.1	+	10104	10139	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) → PrfA (COG0216) prfA (PRK00591) → hypo → HemK (COG2890) PRK09328 (PRK09328) →
env-395	SRS015540_C1145684	-	441	406	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) →
env-396	SRS015985_WUGC_scaffold_1374	+	106	141	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-397	SRS062878_LANL_scaffold_77532	+	103	138	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-398	SRS014686_C893659	-	161	126	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-399	SRS014690_WUGC_scaffold_25959	-	648	613	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) →
env-400	SRS015799_C834453	+	101	136	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-401	SRS015895_C570099	-	828	793	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) →
env-402	SRS015989_C2178125	+	3039	3074	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) →
env-403	SRS017025_C1697043	-	417	382	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-404	SRS017215_Baylor_scaffold_6391	+	667	702	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) →
env-405	SRS018971_WUGC_scaffold_9088	+	2824	2859	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) PRK09328 (PRK09328) →
env-406	SRS019587_C1062782	+	2489	2524	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) →
env-407	SRS022625_Baylor_scaffold_8635	+	256	291	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-408	SRS023987_Baylor_scaffold_8935	+	101	136	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-409	SRS024447_LANL_scaffold_55871	+	3040	3075	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) → PrfA (COG0216) prfA (PRK00591) →
env-410	SRS024470_C1034718	-	291	256	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-411	SRS043755_C2262638	+	181	216	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-412	SRS050029_WUGC_scaffold_8539	-	2986	2951	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) PRK09328 (PRK09328) →
env-413	SRS054776_C1596217	+	158	193	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-414	SRS056892_LANL_scaffold_10358	-	1175	1140	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) → PrfA (COG0216) prfA (PRK00591) →
env-415	SRS063272_C727711	+	103	138	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
Gha-3-1	NZ_GL883582.1	+	200120	200155	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) PRK09328 (PRK09328) → hypo →
env-416	Keratinized_gingiva_LANL_scaffold_12580	-	518	483	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) →
env-417	SRS020222_C1000314	+	31	66	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-418	SRS021986_Baylor_scaffold_5911	+	3030	3065	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-419	SRS024281_C990110	-	3626	3591	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) PRK09328 (PRK09328) →
env-420	SRS055495_C1103822	+	223	258	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-421	SRS056157_LANL_scaffold_3130	-	22443	22408	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) → PrfA (COG0216) prfA (PRK00591) → HemK (COG2890) PRK09328 (PRK09328) →
env-422	SRS011247_Baylor_scaffold_24154	+	56	91	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) → PCRf (smart00937) PCRf (pfam03462) →
env-423	SRS013506_C1071539	-	305	270	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-424	SRS013711_C1759566	+	247	282	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-425	SRS013947_WUGC_scaffold_13565	+	157	192	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) →
env-426	SRS014687_WUGC_scaffold_3449	-	286	251	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-427	SRS014691_C2541310	+	149	184	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-428	SRS015040_WUGC_scaffold_9073	+	246	281	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-429	SRS015154_C749644	+	103	138	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) → Tdk (COG1435) PRK04296 (PRK04296) →
env-430	SRS015374_C303312	+	108	143	RNA → rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →

env-431	SRS015378.C1036454	+	558	593	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-432	SRS015436.C1704957	-	351	316	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-433	SRS015440.WUGC_scaffold_48560	-	6395	6360	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-434	SRS015470.WUGC_scaffold_63490	-	348	313	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-435	SRS015745.WUGC_scaffold_6005	-	482	447	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-436	SRS016196.C484943	+	277	312	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-437	SRS016600.Baylor_scaffold_2683	+	3030	3065	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-438	SRS017013.Baylor_scaffold_6676	-	592	557	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-439	SRS018329.C1551846	+	51	86	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-440	SRS018359.C1220600	-	348	313	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-441	SRS019073.C2443412	-	309	274	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-442	SRS019125.C619240	-	154	119	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-443	SRS019126.C2186810	+	232	267	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-444	SRS019221.C295755	+	3024	3059	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-445	SRS019976.C716661	+	59	94	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-446	SRS020858.Baylor_scaffold_5085	+	3032	3067	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-447	SRS021473.C876560	-	603	568	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-448	SRS022079.C372086	-	276	241	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-449	SRS022145.C598868	-	166	131	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-450	SRS022532.LANL_scaffold_6630	-	1673	1638	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) → hypo → PrfA (COG0216)prfA (PRK00591) →
env-451	SRS022721.LANL_scaffold_429	+	210	245	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-452	SRS023837.C579087	-	296	261	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-453	SRS024140.C1189075	+	4828	4863	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-454	SRS024377.LANL_scaffold_4712	-	1160	1125	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) →
env-455	SRS042457.C486662	-	351	316	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-456	SRS045254.C914869	-	3935	3900	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-457	SRS045978.C985323	+	72	107	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-458	SRS050628.LANL_scaffold_17394	+	458	493	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-459	SRS051116.C251615	+	534	569	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-460	SRS052668.LANL_scaffold_27772	+	2906	2941	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) →
env-461	SRS052874.LANL_scaffold_5089	-	290	255	RNA → hypo →
env-462	SRS054569.LANL_scaffold_12877	+	354	319	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-463	SRS058105.LANL_scaffold_13652	+	469	504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-464	SRS064809.C824160	-	603	568	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-465	SRS075406.C835742	-	348	313	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-466	SRS077738.LANL_scaffold_4679	-	647	612	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Gha-1-1	NZ_ACD202000014.1	-	557531	557496	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) →
env-467	SRS053917.LANL_scaffold_15970	-	444	409	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-468	Subgingival_plaque.LANL.C11235616	-	423	388	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-469	SRS012285.Baylor_scaffold_61830	-	316	281	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-470	SRS013252.C3418322	-	215	180	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-471	SRS015574.C3437002	+	238	273	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-472	SRS022725.C5893417	-	3760	3725	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-473	SRS047634.C4297156	-	346	311	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-474	SRS049268.C4258038	-	364	329	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-475	SRS049318.LANL_scaffold_177316	-	852	817	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-476	SRS049389.C4591629	-	154	119	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-477	SRS051244.C3395339	-	351	316	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-478	SRS063932.C3959092	-	4053	4018	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-479	SRS014126.C559610	-	349	314	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-480	SRS015060.C1555206	-	905	870	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-481	SRS022536.LANL_scaffold_96129	-	893	858	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-482	SRS017511.C3422862	+	34	69	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-483	SRS015537.C1260669	+	407	442	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-484	SRS019126.WUGC_scaffold_4752	-	943	908	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-485	SRS020220.C3566657	-	510	475	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-486	SRS024441.LANL_scaffold_37855	+	2333	2368	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
Gsa-1-1	NZ_JNJO01000009.1	-	39706	39671	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) →
env-487	SRS019387.C1674147	-	222	187	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-488	SRS043676.WUGC_scaffold_7376	-	288	253	RNA →
env-489	SRS045262.WUGC_scaffold_5583	-	417	382	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-490	SRS057022.LANL_scaffold_32496	-	164	129	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Gcu-1-1	NZ_KE384431.1	+	63435	63471	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Gbe-1-1	NZ_KI271855.1	+	37507	37542	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-491	AUXO018174862.1	-	1094	1063	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) int_mem_yvwzB (TIGR02327)DUF1146 (pfam06612) → hypo →
env-492	NLM004_scaffold46339.1	-	437	405	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → YycJ-like_MBL-fold (cd07733) →
env-493	SRS012273.C3440542	+	90	122	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-494	scaffold33486_3_MH0073	-	380	348	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → YycJ-like_MBL-fold (cd07733) →
env-495	NOF010_scaffold2338_8	-	578	546	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Lactamase_B (smart00849)metallo-hydrolase-like_MBL-fold (cd06262) →
env-496	NOF012_C785263.1	-	175	143	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-497	NOM002_scaffold12570_2	-	538	506	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Lactamase_B (smart00849)metallo-hydrolase-like_MBL-fold (cd06262) →
env-498	NOM028_scaffold34027.1	-	2866	2834	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Lactamase_B (smart00849)PhnP (COG1235) → PRK00103 (PRK00103)SPOUT_MTase (pfam02590) → hypo → PRK15482 (PRK15482)RpiR (COG1737) →
env-499	4491401.3_NODE.43820	-	1176	1144	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-500	SRS015854.C5461434	+	375	407	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-6-1	NZ_KQ235810.1	-	156185	156153	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Lactamase_B (smart00849)PhnP (COG1235) → PRK00103 (PRK00103)SPOUT_MTase (pfam02590) →
env-501	NLM032_scaffold64463_2	+	2904	2936	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Lactamase_B (smart00849)PhnP (COG1235) → PRK00103 (PRK00103)SPOUT_MTase (pfam02590) → hypo → PRK15482 (PRK15482)RpiR (COG1737) →
env-502	BABG01003555.1	-	601	569	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Lactamase_B (smart00849)metallo-hydrolase-like_MBL-fold (cd06262) →
env-503	NLM027_scaffold7634.1	+	182	214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Lactamase_B (smart00849)PhnP (COG1235) → PRK00103 (PRK00103)SPOUT_MTase (pfam02590) →
env-504	NOF005_scaffold9442_3	+	1100	1132	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-505	NOM009_scaffold48146_7	+	6961	6993	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Lactamase_B (smart00849)PhnP (COG1235) → PRK00103 (PRK00103)SPOUT_MTase (pfam02590) → hypo → PRK15482 (PRK15482)RpiR (COG1737) →
env-506	SRS020233.C4059603	-	223	191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
[sa-1-1	NZ_JMLH01000001.1	-	51630	51598	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Lactamase_B (smart00849)PhnP (COG1235) → PRK00103 (PRK00103)SPOUT_MTase (pfam02590) →
Cba-1-1	NZ_BAHP02000099.1	-	13426	13394	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Lactamase_B (smart00849)PhnP (COG1235) → PRK00103 (PRK00103)SPOUT_MTase (pfam02590) →
env-507	SRS014313.WUGC_scaffold_17457	+	2437	2470	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-508	SRS016517.C20315060	+	178	211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-509	SRS011586.C3323726	+	256	289	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-510	SRS016267_C4307118	+	16	49	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-511	SRS016495_C1903365	+	841	874	RNA → hypo →
env-512	SRS019601_C1887446	-	239	206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-4-1	NZ_DS562854.1	-	119936	119903	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-513	AKZA01000288.1	+	213	245	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eca-6-1	NZ_GG692817.1	+	313634	313666	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eca-7-1	NZ_GG670387.1	+	312337	312369	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eca-4-1	NC_020995.1	-	2799854	2799822	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efl-1-1	NZ_KB946265.1	-	427638	427606	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eca-2-1	NZ_KE350248.1	-	72485	72453	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eca-3-1	NZ_GL872323.1	+	1257066	1257098	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-315-1	NZ_KE350268.1	-	261980	261948	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-4-1	NZ_KE351443.1	-	174912	174880	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-14-1	NZ_AKKS01000010.1	+	102506	102538	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-514	AUXO014118027.1	+	50137	50167	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → hypo → LemA (pfam04011) →
Hma-1-1	NZ_HE998568.1	-	708686	708652	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-515	SRS054590.LANL_scaffold_6972	-	112	78	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Hfi-1-1	NZ_GG657553.1	-	397887	397853	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-516	SRS015217.WUGC_scaffold_37705	+	9104	9137	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Edo-1-1	NZ_DS483478.1	-	12891	12858	NDK (smart00562)NDK (pfam00334) → Tdk (COG1435)PRK04296 (PRK04296) → NDK (smart00562)NDK (pfam00334) →
env-517	AUXO014926912.1	+	1177	1210	RNA →
Rma-1-1	NZ_CVPE01000005.1	-	403752	403721	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-518	JGI12273J12029_10010743	+	2725	2769	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-519	2200826318	-	563	529	RNA → ← hypo
Lpa-39-1	NZ_JH414991.1	+	1619	1652	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-520	HBC_scaff_10134855	-	119	87	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-521	HBC_ctgs_1288573	-	119	87	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lku-2-1	NZ_JPYX01000004.1	-	23057	23025	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lku-2-2	NZ_JPUI01000040.1	+	29050	29082	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lku-3-1	NZ_AZBY01000009.1	-	22976	22944	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-522	AUXO010035532.1	-	150	121	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-523	AUXO010163029.1	-	150	121	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-524	JGI24502J29692_10015897	+	1091	1123	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-525	JGI24503J29689_10022200	+	1121	1153	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-526	JGI24500J29687_10017177	+	1046	1078	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-527	SRS014979_C3222903	+	585	613	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →
env-528	SRS065504.LANL_scaffold_46983	-	2440	2412	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →
env-529	scaffold1558_1.MH0054	+	596	624	RNA → NrdG (COG0602)Fer4_12 (pfam13353) →
env-530	scaffold31141_5.O2.UC-19	-	124	96	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →
env-531	SRS017821_C2327271	+	300	328	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →
env-532	SRS024435_C3071163	-	138	110	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →
env-533	scaffold53311_1.MH0066	-	2650	2622	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →
env-534	scaffold65125_1.V1.UC-10	+	484	512	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → trimeric_dUTPase (cd07557)dut (PRK00601) →
env-535	SRS014235_C3411809	-	244	216	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → trimeric_dUTPase (cd07557)dut (PRK00601) →
env-536	scaffold3439_3.MH0002	-	672	644	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →
env-537	C6319386_1.MH0064	+	429	457	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → trimeric_dUTPase (cd07557)dut (PRK00601) →
env-538	scaffold208933_1.MH0006	-	2939	2911	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →
env-539	UnmappedStool_Broad_scaffold_489424	+	400	428	RNA → NrdG (COG0602)Fer4_12 (pfam13353) →
env-540	SRS011586.WUGC_scaffold_28380	+	890	918	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → dut (PRK00601) →
env-541	SRS012273_C3719647	-	681	653	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →

env-542	SRS014613.WUGC_scaffold_29094	-	2441	2413	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →
env-543	SRS015782.C3240512	-	148	120	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →
env-544	SRS020869.Baylor_scaffold_15611	+	608	636	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → trimeric_dUTPase (cd07557)dut (PRK00601) →
env-545	SRS022071.C3053836	-	2440	2412	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →
env-546	SRS047014.C3437135	-	64	36	RNA → NrdG (COG0602)Fer4_12 (pfam13353) →
env-547	SRS064276.LANL_scaffold_22062	-	2440	2412	RNA → NrdG (COG0602)Fer4_12 (pfam13353) → Dut (COG0756)dut (PRK00601) →
Fso-1-1	NZ_KI912400.1	+	87614	87648	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-548	HCF12C_316963	+	338	369	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → secG (TIGR00810)SecG (pfam03840) →
env-549	HCF12C_1.1.newblercontig523487	-	64	33	RNA → hypo →
env-550	JGI24724J26744_10133593	+	70	102	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Psp-21-1	NZ_HE610963.1	+	234443	234480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-551	AUXO014364427.1	-	119	87	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-552	AUXO016753630.1	+	178	210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Aes (COG0657)Abhydrolase_3 (pfam07859) →
env-553	RUMENNODE_4188936_197001	-	14624	14592	RNA → ← F420_ligase (pfam01996)
env-554	RUMENNODE_4260751_1	+	37231	37263	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-555	RUMENNODE_4260751_1	+	24591	24623	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-3-1	NZ_AZUC01000056.1	+	43289	43319	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-5-1	NZ_JWIB01000052.1	-	9860	9830	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-556	JGI24024J18818_10001192	-	358	328	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-557	JGI24024J18818_10116008	+	495	525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-558	JGI2065J20421_1018486	-	780	747	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-559	JGI26050J44790_1028750	+	320	352	RNA →
env-560	JGI26051J44788_1026204	-	292	260	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-561	JGI26053J44789_1023599	-	308	276	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-562	JGI26052J44787_1030737	+	185	217	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-563	JGI26055J44792_1008714	+	1514	1546	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-564	JGI26057J44791_1000928	-	1554	1522	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-565	JGI26054J46599_1005137	+	1615	1647	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Wci-1-3	NZ_JWHT01000082.1	+	3980	4012	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Wci-2-1	NZ_AEK01000044.1	-	80525	80493	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Whe-1-1	NZ_BBIK01000004.1	+	62770	62802	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-566	BMHBC_2_3182488	-	96	63	RNA → hypo →
env-567	BMHBC_2_4390494	-	96	63	RNA → hypo →
env-568	BMHBC_2_6409884	+	19	52	RNA →
env-569	BMHBC_2_1969890	+	19	52	RNA →
env-570	BMHBC_2_1356989	+	19	52	RNA →
env-571	BMHBC_2_7096089	+	19	52	RNA →
env-572	BMHBC_2_3756228	-	96	63	RNA → hypo →
env-573	BMHBC_2_5769464	-	96	63	RNA → hypo →
env-574	BMHBC_2_5120317	-	96	63	RNA → hypo →
env-575	BMHBC_2_2565350	-	96	63	RNA → hypo →
¹ env-576	3300001422_104017	-	1678	1638	RNA → ← COG5421 (COG5421)
env-577	C927572_1	-	10779	10748	RNA → ← hypo
Lci-4-1	NZ_CCNH01000002.1	+	172817	172848	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lci-4-2	NZ_CCNH01000004.1	+	146295	146326	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lci-4-3	NZ_JVUU01000031.1	-	65028	64997	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lci-5-1	NC_010471.1	+	373008	373039	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lci-2-1	NZ_CAGF01000011.1	-	59597	59566	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lci-1-1	NZ_CAGE01000004.1	-	59603	59572	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lci-3-1	NZ_CAGG01000003.1	-	59603	59572	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lca-25-1	NC_018673.1	-	1311252	1311221	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-578	F76GVBA01AN3WN	-	315	284	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-579	AUXO011646564.1	+	63	96	RNA →
Psa-1-1	NZ_KB895396.1	-	5948	5915	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-580	AUXO010493877.1	-	441	409	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ MetG (COG0143)PRK12267 (PRK12267)→
env-581	JGI12273J12029_10023051	+	247	288	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-582	scaffold70953_1_MH0035	-	9668	9638	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
env-583	SRS022609_Baylor_scaffold_81875	-	4601	4571	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
env-584	scaffold175278_1_MH0012	-	648	618	TadA (COG0590)MafB19-deam (pfam14437)→ hypo→ hypo→ hypo→ hypo→ hypo→
env-585	C3957884_1_MH0040	+	1247	1277	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
env-586	scaffold111154_1_MH0065	+	2910	2940	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
env-587	4491423.3_NODE_1010	-	11026	10996	TadA (COG0590)MafB19-deam (pfam14437)→ hypo→ hypo→ hypo→ hypo→
env-588	scaffold73462_1_MH0044	-	3763	3733	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
env-589	scaffold17516_6_MH0066	+	1479	1509	TadA (COG0590)MafB19-deam (pfam14437)→ hypo→ hypo→ hypo→ hypo→
env-590	scaffold114987_1_MH0070	-	572	542	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
env-591	scaffold24028_2_MH0076	+	2809	2839	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
env-592	C3731285_1_MH0081	-	958	928	TadA (COG0590)MafB19-deam (pfam14437)→ hypo→ hypo→ hypo→ hypo→
env-593	SRS015663_C3126280	+	4752	4782	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→ hypo→
env-594	SRS019582_WUGC_scaffold_86237	-	1630	1600	TadA (COG0590)MafB19-deam (pfam14437)→
env-595	SRS051031_LANL_scaffold_20891	-	3442	3412	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Cko-1-1	NZ_JXAL01000029.1	+	95618	95652	PRK10860 (PRK10860)TadA (COG0590)→ hypo→ hypo→ hypo→ hypo→ hypo→
env-596	CTBMPR_c3813	-	1882	1848	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
env-597	2200758960	-	2614	2581	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→ hypo→ hypo→ hypo→ hypo→
env-598	CTBMPR_c24234	+	49	82	DnaX (COG2812)PRK05563 (PRK05563)→
Pta-1-1	NZ_AULE01000002.1	-	8222	8189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-11-1	NZ_JMDX01000001.1	-	7605	7572	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pal-4-1	NZ_ATMS01000017.1	-	7605	7572	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-28-1	NZ_JMLT01000022.1	+	85290	85323	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-599	JGI25151J46595_10251769	-	302	269	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pal-1-1	NZ_AMBZ01000002.1	+	805774	805807	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pal-5-1	NZ_ATMT01000041.1	+	2855	2888	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pte-3-1	NZ_KB895427.1	+	72449	72482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-600	JGI25151J46595_10020550	-	1564	1531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-32-1	NZ_JXAK01000056.1	-	6498	6465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-601	JGI12341J12878_1004125	+	582	615	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→ hypo→ hypo→
env-602	sg4i_contig13910	+	382	415	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-603	sg4i_contig20097	+	2292	2325	RNA → ←hypo
env-604	JGI12341J12878_1005421	-	1095	1062	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→ hypo→ hypo→
env-605	sgz454il_contig08209	+	30513	30546	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-606	2200252324	-	7897	7866	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ DUF4969 (pfam16339)→
env-607	GBANfinal_FHNL2OP04XNKIIV	-	208	170	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-608	JGI25151J46595_10336534	+	21	56	RNA → ←hypo
Pan-2-1	NZ_HG005146.1	+	43659	43692	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-609	2200180934	+	143	179	RNA → ←hypo
Pte-2-1	NZ_JTHP01000028.1	+	65669	65702	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

Psp-7-1	NZ_ASSB01000327.1	+	24049	24082	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-1-1	NZ_JH601038.1	+	56254	56287	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppe-1-1	NZ_AGF01000014.1	+	59100	59133	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppo-3-1	NZ_ASRZ01000123.1	+	30332	30365	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppo-4-1	NZ_JWJJ01000013.1	-	4811	4778	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppo-7-1	NZ_AIPP01000115.1	+	55583	55616	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-18-1	NZ_AMQU01000013.1	+	55780	55813	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppo-2-1	NZ_CP009909.1	+	3174641	3174674	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppo-9-1	NZ_CP006872.1	+	173664	173697	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppo-5-1	NZ_GL905390.1	+	151743	151776	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppo-1-1	NC_017542.1	+	175402	175435	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppo-2-2	NZ_CP010268.1	-	2491086	2491053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppo-8-1	NC_014622.2	+	176703	176736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-8-1	NZ_ASRY01000124.1	+	19295	19328	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pte-1-1	NC_016641.1	+	1753265	1753298	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-30-1	NZ_JMLR01000019.1	-	4809	4776	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppe-2-1	NZ_CP011512.1	+	178280	178313	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppo-6-1	NC_014483.2	+	176239	176272	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppo-10-1	NZ_ASSA01000052.1	-	4575	4542	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-610	GI4A6AL01D1VT0	-	327	303	RNA → rplB (PRK09374)Ribosomal_L2_C (pfam03947)→
Ppi-1-1	NZ_BAVZ01000024.1	+	39507	39540	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-24-1	NZ_JRNV01000066.1	+	20032	20065	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-19-1	NZ_CP010976.1	+	5003103	5003136	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-611	MA40A_GDRVJ9S02I8S30_right	+	185	218	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-612	JGI25162J39368_1010853	-	531	498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-613	CLOF_F4EQGSL02GBV14	-	158	125	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-33-1	NZ_LELF01000050.1	-	4969	4936	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-13-1	NZ_ASPU01000009.1	-	4594	4561	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-15-1	NZ_ASPR01000001.1	+	36319	36352	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-26-1	NZ_ANHX01000073.1	-	4568	4535	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-23-1	NZ_AWUK01000005.1	-	4782	4749	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-22-1	NZ_AWUJ01000041.1	+	47513	47546	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-2-1	NZ_AEXS01000174.1	-	4730	4697	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pvo-1-1	NZ_ADHJ01000005.1	+	51394	51427	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-16-1	NZ_ASPT01000039.1	+	51294	51327	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Gsp-5-1	NC_013406.1	+	153054	153087	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-14-1	NZ_ASPW01000021.1	-	4809	4776	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-10-1	NZ_LAZU01000035.1	+	58827	58860	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-52-1	NZ_JAEO01000062.1	-	4215	4182	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pla-1-1	NZ_AGIP01000028.1	-	5136	5103	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-614	CLOF_F4EQGSL02H5UCR	-	445	412	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pst-1-1	NZ_CP009286.1	+	179434	179466	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-20-1	NZ_JADQ01000029.1	+	50634	50667	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-615	2200248758	-	316	283	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pba-1-1	NZ_KE159656.1	-	11310	11277	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-5-1	NZ_GG695996.1	+	45052	45085	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pma-2-1	NZ_KN125580.1	-	10211	10177	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pbe-1-1	NZ_CP011058.1	+	2435438	2435472	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pha-2-1	NZ_AULV01000020.1	-	5328	5295	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ YscJ_FliF_C (pfam08345)→
Ppi-2-1	NZ_AULX01000026.1	+	122523	122557	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo → hypo → hypo → hypo → hypo →
env-616	sgz454il.contig00281	+	26477	26515	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo →

env-642	SRS015663_C3017608	-	163	131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-643	SRS016095_WUGC_scaffold_38231	+	6582	6614	RNA →
env-644	SRS048164_C2096952	+	94	126	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-645	SRS051031_LANL_scaffold_12183	-	370	338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → YycJ-like_MBL-fold (cd07733) →
env-646	SRS058723_C6768793	-	194	162	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-647	SRS063985_C2384154	-	226	194	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
bLF-1-1	NZ_CCMM01000012.1	-	232933	232901	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Lactamase_B (smart00849)PhnP (COG1235) → PRK00103 (PRK00103)SPOUT_MTase (pfam02590) →
env-648	SL_9KL_010_SED_10062519	+	317	344	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-649	SL_3KL_010_SED_10161252	+	369	396	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-650	JGI24500J29687_10038433	+	5406	5434	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) →
env-651	JGI24502J29692_10023353	+	2154	2182	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo → TktA (COG0021)PRK05899 (PRK05899) → MnmG (COG0445)PRK05192 (PRK05192) → RsmG (COG0357)gidB (PRK00107) → ParB (smart00470)Spo0J (COG1475) → DUF951 (pfam06107) →
env-652	JGI24501J29690_1029513	+	2144	2172	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-653	JGI24503J29689_10024265	+	9945	9973	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) →
env-654	JGI24499J29688_1021746	+	118	146	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-655	RUMENNODE_1702127.1	-	23333	23300	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-656	RUMENNODE_3744369.1	-	1562	1528	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → 2A78 (TIGR00950)EamA (pfam00892) → MetG (COG0143)PRK12267 (PRK12267) →
env-657	AUXO015798099.1	+	1486	1520	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-658	RUMENNODE_3527277.1	+	1709	1743	RNA → (big gap) RhaT (COG0697) → ArcA (COG2235)PRK01388 (PRK01388) → ArcA (COG2235)PRK01388 (PRK01388) →
env-659	RUMENNODE_3876952.1	-	3758	3725	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-660	2211729444	+	222	255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-661	2156473860	+	222	255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-662	RUMENNODE_3728468.1	-	2906	2873	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → EamA (pfam00892) → DegV (TIGR00762)DegV (pfam02645) → Hydrolase_4 (pfam12146) →
env-663	RUMENNODE_3917021_13000	-	6817	6784	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-664	AUXO018183523.1	-	52	19	RNA →
env-665	JGI24707J26582_10000610	+	18900	18931	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-666	JGI24708J26588_10001567	-	9771	9740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-667	JGI24712J26585_10002850	-	486	455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-668	JGI24712J26585_10002883	-	486	455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-669	JGI24711J26586_10044882	+	779	810	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-670	JGI24709J26583_10001041	-	9926	9895	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-671	JGI24710J26742_10005051	+	8426	8457	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-672	JGI24500J29687_10039037	+	2191	2222	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-673	JGI24502J29692_10024412	+	325	356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-674	JGI24501J29690_1058253	+	141	172	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-675	JGI24503J29689_10041332	+	125	156	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-676	JGI24712J26585_10116731	-	699	670	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-677	JGI24502J29692_10067855	+	403	432	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-678	AUXO010821195.1	+	270	300	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-679	RUMENNODE_4230474.1	-	923	893	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) hypo → int_mem_ywzB (TIGR02327)DUF1146 (pfam06612) →
env-680	AUXO015533467.1	-	756	724	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502)
env-681	AUXO014634809.1	+	2187	2219	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lga-2-1	NZ_JVEV01000034.1	+	23868	23900	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lho-2-1	NZ_CAKE01000002.1	-	165569	165537	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)

env-682	UnmappedStool_Broad_C251615744	-	374	333	RNA → ← COG4603 (COG4603)
env-683	SRS011239_C2568925	-	248	207	RNA → ← COG4603 (COG4603)
env-684	JGI24707J26582_10604531	-	183	149	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bse-3-1	NZ_ATXL01000033.1	-	11293	11261	RNA → RpmE (COG0254)rpmE2 (PRK01678) →
Aph-1-1	NZ_JAGN01000024.1	-	682	650	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-685	scaffold9639_3_MH0012	+	1656	1677	RNA → biotinyl_domain (cd06850)DRE_TIM_PC_TC_5S (cd07937)AccC (COG0439)PRK12999 (PRK12999)PYC_O
env-686	3300000558_10113212	+	2767	2797	hypo → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-687	3300001580_11274066	-	128	98	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lbu-1-1	NZ_GG669719.1	+	45475	45508	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhi-1-1	NZ_GG669998.1	+	89473	89506	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbr-7-1	NZ_GG669611.1	+	46598	46631	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfa-4-1	NZ_BAK101000010.1	+	39794	39827	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lcu-1-1	NZ_JTAL01000005.1	-	26638	26605	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lki-2-1	NZ_JH591051.1	+	2889	2922	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lot-1-1	NZ_BASH01000008.1	+	45034	45067	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-688	2205249974	-	100	67	RNA → hypo →
env-689	2204581147	-	204	171	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-690	2158547212	-	204	171	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbu-3-1	NC_015428.1	-	1626594	1626561	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ata-1-1	NZ_AUCD01000015.1	+	29931	29963	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-691	2200849697	+	2519	2552	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → spore_YhcN_YlaJ (TIGR02898) → hypo → hypo →
Pcu-1-1	NZ_AEDD01000010.1	-	172375	172342	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo →
env-692	SRS011111_C511282	+	1560	1591	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-693	SRS023604_C786152	-	5199	5168	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-694	SRS015072_WUGC_scaffold_306	+	2849	2880	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-695	SRS015073_C87470	-	246	215	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-696	SRS015225_WUGC_scaffold_40	+	4907	4938	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-697	SRS042428_WUGC_scaffold_125	+	5251	5282	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-698	SRS044742_C45202	+	404	435	RNA →
env-699	SRS049237_WUGC_scaffold_364	-	44771	44740	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-700	SRS051505_C116585	-	5949	5918	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-701	SRS052756_LANL_scaffold_202	+	30811	30842	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-702	SRS054962_LANL_scaffold_154	+	7561	7592	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-703	SRS055298_LANL_scaffold_1060	+	56113	56144	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-7-1	NZ_ADHG01000001.1	-	204612	204581	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-11-1	NZ_AEKJ01000015.1	-	74795	74764	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-12-1	NZ_AEKK01000016.1	-	44828	44797	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-9-1	NZ_AEKI01000026.1	-	46443	46412	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-15-1	NZ_AEHO01000007.1	-	160441	160410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-14-1	NZ_AEHP01000054.1	-	71416	71385	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-18-1	NZ_AEHR01000018.1	-	44815	44784	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-20-1	NZ_AEXK01000022.1	-	74609	74578	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-17-1	NZ_AEXP01000019.1	-	175111	175080	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-8-1	NZ_GG700805.1	+	256231	256262	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-5-1	NZ_GL622333.1	-	1005713	1005682	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-10-1	NZ_AEKH01000010.1	-	74730	74699	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-704	SRS016105_WUGC_scaffold_100	-	158089	158058	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-705	SRS023468_LANL_scaffold_19280	+	4225	4256	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-706	SRS016111_WUGC_scaffold_61	-	45180	45149	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-707	SRS022545_LANL_scaffold_139	-	1695	1664	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-708	SRS050184.LANL_scaffold_130	-	17992	17961	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-709	SRS064704.LANL_scaffold_211	-	17993	17962	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-16-1	NZ_AEHN01000014.1	-	44898	44867	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-19-1	NZ_AEXJ01000019.1	-	44735	44704	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lsp-9-1	NZ_JH164952.1	-	574321	574290	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-13-1	NZ_AEHQ01000072.1	-	7349	7318	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-710	2205772966	+	552	584	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-711	2157969722	+	325	357	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-712	SRS075419.C110109	-	966	934	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-713	SRS019379.C28234	+	18298	18330	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-714	SRS022734.LANL_scaffold_274	+	10950	10982	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-715	SRS023850.C136155	+	237	269	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-716	SRS024428.C55026	+	18356	18388	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-717	SRS047335.WUGC_scaffold_762	+	4747	4779	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-718	SRS052620.C35955	+	10950	10982	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-719	SRS062520.LANL_scaffold_96	-	17372	17340	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-2-2	NZ_JVOU01000020.1	-	137321	137289	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-2-3	NZ_JVOL01000001.1	-	22205	22173	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-2-4	NZ_JUTQ01000039.1	-	22209	22177	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-12-1	NC_008530.1	+	296324	296356	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-11-1	NZ_ACOZ01000042.1	+	4725	4757	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-9-1	NZ_KN050667.1	-	187618	187586	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-10-1	NZ_KN050675.1	-	196087	196055	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-4-1	NZ_AUUE01000002.1	+	86255	86287	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-5-1	NZ_BALQ01000001.1	+	396473	396505	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-6-1	NZ_AKFQ01000002.1	-	180385	180353	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ljo-3-1	NZ_AFQJ01000004.1	+	1347121	1347153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ljo-5-1	NC_017477.1	+	311419	311451	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ljo-6-1	NC_013504.1	+	280910	280942	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ljo-2-1	NC_022909.1	+	308188	308220	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-720	scaffold23403_2.V1.CD-11	+	274	306	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ljo-7-1	NC_005362.1	+	301703	301735	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-721	SRS011269.Baylor_scaffold_351	-	274	242	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-2-5	NZ_JUKW01000060.1	+	23407	23439	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-7-1	NZ_GL379581.1	-	187468	187436	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-3-1	NZ_CP006809.1	+	312647	312679	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-8-1	NZ_KL402718.1	+	399124	399156	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ljo-1-1	NZ_LIGY01000084.1	-	24710	24678	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-722	DOF012_scaffold379_3	+	2956	2988	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-2-6	NZ_JVG01000050.1	+	18423	18455	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ljo-4-1	NZ_GG670121.1	-	182612	182580	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lgi-2-1	NZ_CAKC01000030.1	+	8283	8315	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lsp-10-1	NZ_KB822435.1	-	181390	181358	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lcr-11-1	NC_014106.1	+	276225	276256	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-723	SRS056796.LANL_scaffold_1239	-	1183	1152	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-724	DLM012_C404467_1	-	274	243	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-725	SRS015425.WUGC_scaffold_461	+	3773	3804	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-726	SRS062752.LANL_scaffold_621	+	1742	1773	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-727	SRS064376.LANL_scaffold_486	+	2458	2489	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lcr-7-1	NZ_ADGR01000062.1	+	8752	8783	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-728	Contig2087.1	+	770	801	RNA → rpmE (PRK00019)rpmE2 (PRK01678)L31 (TIGR00105)Ribosomal_L31 (pfam01197) →
env-729	SRS024310.LANL_scaffold_284	-	5059	5028	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-730	SRS011355_Baylor_scaffold_238	-	4759	4728	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-731	SRS014465_C104071	+	8731	8762	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-732	SRS014466_C33055	+	8731	8762	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-733	SRS014494_C170078	-	239	208	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-734	SRS015054_WUGC_scaffold_298	+	8828	8859	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-735	SRS015072_WUGC_scaffold_197	+	8688	8719	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-736	SRS015073_C87312	+	548	579	RNA → rpmE (PRK00019)rpmE2 (PRK01678)L31 (TIGR00105)Ribosomal_L31 (pfam01197) →
env-737	SRS015168_WUGC_scaffold_217	-	11230	11199	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-738	SRS016191_WUGC_scaffold_240	-	4886	4855	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-739	SRS016516_LANL_scaffold_146	-	19252	19221	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-740	SRS016559_Baylor_scaffold_103	+	8762	8793	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-741	SRS017520_Baylor_scaffold_434	+	8671	8702	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-742	SRS017700_Baylor_scaffold_322	+	924	955	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-743	SRS018769_WUGC_scaffold_137	+	8731	8762	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-744	SRS019600_WUGC_scaffold_105	-	4891	4860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-745	SRS019989_Baylor_scaffold_99	-	4890	4859	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-746	SRS020349_Baylor_scaffold_168	-	19254	19223	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-747	SRS021969_C38256	+	8828	8859	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-748	SRS022158_LANL_scaffold_360	+	8827	8858	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-749	SRS042858_LANL_scaffold_175	+	8751	8782	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-750	SRS049237_C38452	+	8826	8857	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-751	SRS051505_C116175	-	244	213	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-752	SRS056695_LANL_scaffold_347	+	8772	8803	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-753	SRS057807_LANL_scaffold_81	+	7964	7995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-754	SRS065347_LANL_scaffold_257	-	4891	4860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-755	SRS077751_C52761	+	8762	8793	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lcr-9-1	NZ_GG669835.1	+	9537	9568	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lcr-10-1	NZ_GG704612.1	-	70406	70375	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lcr-6-1	NZ_GG698762.1	+	215551	215582	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lcr-2-1	NZ_JH932290.1	-	67347	67316	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lcr-3-1	NZ_JH932272.1	+	214526	214557	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lcr-4-1	NZ_KI391980.1	-	180476	180445	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lcr-8-1	NZ_GL531743.1	+	68214	68245	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lcr-5-1	NZ_GL877787.1	+	47874	47905	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lcr-1-1	NZ_AXLM01000027.1	-	82277	82246	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lam-1-1	NZ_ADNY01000029.1	-	80869	80837	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lha-1-1	NZ_BALY01000007.1	-	20680	20648	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-756	C4681636_1_MH0065	-	1489	1459	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → ATPgrasp_ST (pfam14397) →
					PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-757	AUXO014458590.1	+	1212	1242	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
					PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) →
					SpoIID (COG2385)SpoIID (pfam08486) →
env-758	AUXO016429116.1	+	81	111	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-759	AUXO011676208.1	-	513	483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502)
env-760	AUXO011678380.1	+	143	173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-761	RUMENNODE_4330698.1	+	57826	57856	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502)
					DUF1146 (pfam06612) → SpoIID (COG2385)SpoIID_LytB (TIGR02669) →
					PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → hypo → LytTR (smart00850)LytTR (pfam04397) →
env-762	AUXO017045166.1	-	207	177	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-763	08_07_CONTROL_DNA_scaffold35288.1	+	373	404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-2-1	NZ_JQNG01000002.1	+	962368	962401	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Csp-8-1	NC_015391.1	+	305155	305188	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-764	AUXO010645718.1	-	720	689	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →

env-765	2227219885	+	182	213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-766	HCF12C_86226	-	167	134	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-767	HCF12C_91840	-	3217	3187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpoC2 (CHL00117)CYK3 (COG5279) → RimK (COG0189)ATPgrasp_ST (pfam14397) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → Tdk (COG1435)PRK04296 (PRK04296) →
env-768	JGI24728J21555_1043850	-	433	404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lhe-5-1	NZ_HG531246.1	+	152	183	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-9-1	NC_021744.1	-	2084137	2084106	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-769	DOF008_scaffold29004.2	-	2511	2480	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lga-1-1	NZ_BALB01000002.1	-	148004	147973	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-770	SRS017103_C2505406	-	285	254	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lac-13-1	NC_006814.3	+	256007	256038	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lac-5-1	NZ_HG313783.1	+	85062	85093	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → MurF (COG0770)Mur_ligase_M (pfam01197) → HELICc (smart00490)DEXDc (smart00487)SrmB (COG0513) → AcpS (COG0736)acpS (PRK00070) → PLPDE_III_AR (cd00430)alr (PRK00053) →
Lac-3-1	NZ_HG313752.1	+	48471	48502	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → MurF (COG0770)Mur_ligase_M (pfam01197) → HELICc (smart00490)DEXDc (smart00487)SrmB (COG0513) → AcpS (COG0736)acpS (PRK00070) → PLPDE_III_AR (cd00430)alr (PRK00053) →
Lac-8-1	NZ_HG313829.1	+	85041	85072	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → MurF (COG0770)Mur_ligase_M (pfam01197) → HELICc (smart00490)DEXDc (smart00487)SrmB (COG0513) → AcpS (COG0736)acpS (PRK00070) → PLPDE_III_AR (cd00430)alr (PRK00053) →
Lac-9-1	NC_021181.2	+	256004	256035	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lac-1-1	NZ_CP010432.1	+	256305	256336	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lac-12-1	NZ_GG669567.1	+	189473	189504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lac-4-1	NZ_CBLP01000004.1	+	134601	134632	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → MurF (COG0770)Mur_ligase_M (pfam01197) → HELICc (smart00490)DEXDc (smart00487)SrmB (COG0513) → AcpS (COG0736)acpS (PRK00070) → PLPDE_III_AR (cd00430)alr (PRK00053) →
Lac-7-1	NZ_CBLT010000021.1	+	93153	93184	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → MurF (COG0770)Mur_ligase_M (pfam01197) → HELICc (smart00490)DEXDc (smart00487)SrmB (COG0513) → AcpS (COG0736)acpS (PRK00070) → PLPDE_III_AR (cd00430)alr (PRK00053) →
Lac-2-1	NZ_AYUB01000060.1	+	523	554	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lac-6-1	NZ_BALR01000003.1	-	87861	87830	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-13-1	NZ_GG700752.1	+	521294	521325	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-6-1	NZ_HG531010.1	+	1181	1212	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-4-1	NZ_CBUN010000034.1	+	1463	1494	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-12-1	NC_010080.1	+	286737	286768	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-7-1	NZ_HG530779.1	-	32078	32047	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-10-1	NZ_CP002427.1	+	229346	229377	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-3-1	NZ_CP009907.1	+	452665	452696	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-3-2	NZ_CP011386.1	+	241847	241878	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-14-1	NC_017467.1	+	267989	268020	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-8-1	NZ_CBUH010000066.1	-	32297	32266	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-15-1	NC_018528.1	+	260860	260891	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-771	scaffold10515_1_V1.CD-11	+	1726	1757	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-772	DLM027_scaffold20299.1	+	2704	2735	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-773	2205115470	-	638	607	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-774	2210389846	-	188	157	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-775	2157274238	-	188	157	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-776	2157676175	-	638	607	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lsp-12-1	NZ_CDLD01000004.1	+	49487	49518	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lam-3-1	NC_017470.1	+	259874	259905	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lac-11-1	NC_015214.1	+	258247	258278	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → hypo →
Lam-2-1	NC_014724.1	+	283638	283669	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lki-3-1	NZ_BALU01000004.1	-	89390	89359	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lke-2-1	NC_015602.1	+	2075582	2075613	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Lke-1-1	NZ_BAMG01000001.1	+	24696	24727	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lul-1-1	NZ_GG693256.1	+	130929	130960	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-777	AUXO018661423.1	+	171	201	RNA → rpmE (PRK00528)rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-778	AUXO016587397.1	+	680	712	RNA →
env-779	NLF011_scaffold650_4	+	511	541	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-780	scaffold17049_11_MH0065	-	1359	1329	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) DUF1146 (pfam06612) → SpoIID (COG2385) SpoIID (pfam08486) →
Slu-3-1	NZ_JONV01000007.1	-	39962	39933	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057)SUA5 (pfam03481) LMWPc (smart00226)Wzb (COG0394) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) → PRK13690 (PRK13690)DUF436 (pfam04260) → GlyA (COG0112)glyA (PRK00011) → Upp (COG0035)upp (PRK00129) → WecB (COG0381)wecB (TIGR00236) →
Sro-1-1	NZ_JXII01000006.1	-	39825	39796	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → SUA5 (COG0009)TIGR00057 (TIGR00057)SUA5 (pfam03481) LMWPc (smart00226)Wzb (COG0394) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) → PRK13690 (PRK13690)DUF436 (pfam04260) → GlyA (COG0112)glyA (PRK00011) → Upp (COG0035)upp (PRK00129) → WecB (COG0381)wecB (TIGR00236) →
env-781	4491423.3_NODE.115429	+	19212	19243	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) DUF1146 (pfam06612) → SpoIID (COG2385) SpoIID_LytB (TIGR02669) →
env-782	scaffold74606_2_MH0009	-	3256	3225	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) DUF1146 (pfam06612) → SpoIID (COG2385) SpoIID_LytB (TIGR02669) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-783	scaffold25277_3_MH0012	+	3494	3525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) DUF1146 (pfam06612) → SpoIID (COG2385) SpoIID_LytB (TIGR02669) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-784	scaffold97436_3_MH0042	+	652	683	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-785	scaffold96667_1_MH0050	+	19222	19253	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) DUF1146 (pfam06612) → SpoIID (COG2385) SpoIID_LytB (TIGR02669) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-786	scaffold29407_4_MH0059	+	1082	1113	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) DUF1146 (pfam06612) → SpoIID (COG2385) SpoIID_LytB (TIGR02669) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → hypo →
env-787	scaffold81381_2_MH0060	-	1784	1753	PorA (COG0674)PorB (COG1013)PorG (COG1014)NapF (COG1145)Fer4_7 (pfam12838) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) DUF1146 (pfam06612) → SpoIID (COG2385) SpoIID (pfam08486) →
env-788	scaffold27176_1_MH0065	+	124	155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) DUF1146 (pfam06612) → SpoIID (COG2385) SpoIID_LytB (TIGR02669) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → hypo →
env-789	scaffold62388_2_MH0077	-	688	657	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502)
env-790	scaffold19282_4_MH0081	-	2750	2719	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) DUF1146 (pfam06612) → SpoIID (COG2385) SpoIID_LytB (TIGR02669) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-791	scaffold70033_3_V1.UC-14	+	2592	2623	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) DUF1146 (pfam06612) → SpoIID (pfam08486) →
env-792	4491477.3_NODE.7390	+	65032	65063	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502) DUF1146 (pfam06612) → SpoIID (COG2385) SpoIID_LytB (TIGR02669) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → hypo →
env-793	scaffold16126_4_MH0031	+	2616	2647	PorA (COG0674)PorB (COG1013)PorG (COG1014)NapF (COG1145)Fer4_7 (pfam12838) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-794	C2024528_1_MH0079	+	208	239	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571) LacAB_rpiB (pfam02502)
Aot-1-1	NZ_JH992958.1	+	468018	468051	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-795	scaffold28040_3_MH0086	-	152	127	RNA → hypo →
env-796	UnmappedStool_Broad_scaffold_784042	-	503	478	RNA → hypo →
env-797	longitudinal_415_272	+	46843	46868	RNA → BID_2 (smart00635)YjdB (COG5492)Big_2 (pfam02368)T2SS-T3SS_pil_N (pfam13629) →
Tae-1-1	NZ_KI783301.1	-	3374080	3374047	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Cul-1-1	NZ_HG764817.1	-	1769012	1768979	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-798	JGI25320J50211.1018643	+	13	44	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-799	IMNBL1_c0022815	-	113	83	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-800	JGI24707J26582.10026421	-	2395	2364	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-801	JGI24708J26588.10036079	-	1320	1289	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-802	JGI24707J26582.10002967	-	12238	12207	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-803	JGI24708J26588.10002912	+	155	186	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Axy-1-1	NC_018704.1	-	2161096	2161065	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-24-1	NZ_JVDT01000240.1	+	19685	19715	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-71-1	NZ_JNJ01000072.1	-	7691	7661	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-804	2222084013.11956.1	-	385	353	RNA → ←hypo
Lro-2-1	NZ_AKZK01000018.1	-	29624	29592	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lro-2-2	NZ_AUAW01000007.1	-	29920	29888	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-805	RUMENNODE_2902945_304500	+	18085	18113	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-806	AUXO013799381.1	-	329	301	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-807	JGI24707J26582.10473385	-	185	151	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Aha-1-1	NZ_AKIF01000052.1	+	15837	15871	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Hha-2-1	NZ_KE383978.1	+	253591	253623	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssp-1-1	NZ_AMPQ01000010.1	-	54400	54366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lgi-1-1	NZ_CP012034.1	-	1055820	1055788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lve-1-1	NZ_BACR01000034.1	-	75029	74997	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-808	SRS015578_WUGC_scaffold_46456	-	16584	16552	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Tsp-2-1	NZ_ADMN01000100.1	-	335	303	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Tsp-1-1	NZ_AEXQ01000118.1	-	20412	20380	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-809	MC6.MG3.AS1.C1503	+	221	253	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-810	UnmappedStool_Broad_C252689365	-	137	105	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-811	2204775796	+	330	362	RNA →
env-812	2205048070	-	223	191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-813	2157595394	-	223	191	RNA → hypo →
env-814	2157503615	+	330	363	RNA →
env-815	2033367913	+	113	152	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-816	AUXO013136741.1	-	78	48	RNA →
env-817	RUMENNODE_3528681.1	+	6693	6724	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-818	JGI24503J29689.10133851	-	152	124	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-819	DLM022_scaffold4159_5	-	1098	1067	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-820	AUXO011650987.1	+	229	260	PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-821	BMHBC_2.6286536	+	6	40	RNA →
env-822	BMHBC_2.6988570	+	6	40	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-823	3300001197.1008646	-	7405	7372	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-824	3300001196.1009145	-	2558	2525	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-825	BMHBC_1.1.newblercontig70055	+	6	39	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-826	3300000053.013632	-	6432	6399	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → spore_YhcN_YlaJ (TIGR02898) →
Bsp-84-1	NZ_JAQQV01000014.1	+	67184	67217	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-827	P_1C_Sed_2_UnCty_1183832	-	137	104	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-828	AUXO014850948.1	-	56	28	RNA →
env-829	BS_KBA_SWE12.21m_c10145057	+	465	493	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-830	BS_KBA_SWE02.21m_10031375	+	450	478	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-831	AUXO010522381.1	+	1127	1157	RNA →
env-832	JGI24709J26583.10053541	+	1520	1554	RNA →
env-833	JGI24709J26583.10110457	+	290	324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-834	JGI24709J26583.10523343	+	18	52	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-835	JGI24710J26742_10524727	+	26	60	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-836	JGI24500J29687_10015483	-	3498	3464	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-837	JGI24503J29689_10008717	+	739	773	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-838	JGI24710J26742_10079609	+	457	491	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-839	JGI24502J29692_10016940	+	738	772	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-840	JGI24710J26742_10183948	+	545	579	RNA →
env-841	AUXO015967212.1	-	302	272	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-842	JGI24023J19991_10028404	-	525	497	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-843	AUXO016697288.1	-	2054	2024	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ FemAB (pfam02388)→
env-844	AUXO012356518.1	+	680	712	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ RimK (COG0189)ATPgrasp_ST (pfam14397)→ PRK05571 (PRK05571)LacAB_rpiB (pfam02502)→ int_mem_ywzB (TIGR02327)DUF1146 (pfam06612)→
env-845	AUXO013477821.1	-	57	25	RNA →
env-846	AUXO018606034.1	+	3910	3942	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-847	AUXO016358659.1	+	2136	2166	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-848	scaffold24133_4_MH0077	+	267	297	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-849	AUXO014157167.1	+	27	57	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PRK05571 (PRK05571)LacAB_rpiB (pfam02502)
env-850	SL_8KL_010_SED_10000546	+	24347	24375	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ TadA (COG0590)MafB19-deam (pfam14437)→ hypo → hypo →
env-851	AUXO015488917.1	-	184	154	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-852	2157781566	+	227	261	RNA → ← hypo
env-853	2204752571	+	238	270	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-854	2158287102	+	231	263	RNA → ← hypo
env-855	SRS022137_WUGC_scaffold_49347	+	225	256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-856	SRS055982_C1494925	+	133	164	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-857	scaffold4806_3_MH0070	-	1189	1159	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-858	scaffold29628_1_MH0069	-	3846	3816	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-859	SRS011134_C5190448	+	4072	4102	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-860	scaffold84902_4_MH0077	+	2414	2444	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ ATPgrasp_ST (pfam14397)→ PRK05571 (PRK05571)LacAB_rpiB (pfam02502)→ int_mem_ywzB (TIGR02327)DUF1146 (pfam06612)→ SpoIID (COG2385)SpoIID_LytB (TIGR02669)→
env-861	AUXO014546959.1	-	171	139	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-862	AUXO018657893.1	-	531	499	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PRK05571 (PRK05571)LacAB_rpiB (pfam02502)
env-863	3300001592_10049945	-	1173	1142	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sko-1-1	NZ_KB898626.1	-	216304	216273	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-864	2204604922	+	33	77	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-865	2158230023	+	33	77	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Cma-4-1	NZ_AMYT01000021.1	+	149937	149969	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-866	AUXO018393888.1	-	164	134	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-867	SL_3KL_010_SED_10124865	+	289	318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→ TadA (COG0590)MafB19-deam (pfam14437)→
env-868	SL_3KL_010_SED_10254284	+	507	536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Cth-1-1	NZ_AFCE01000162.1	-	72996	72965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pya-1-1	NZ_AVBF01000041.1	-	31350	31318	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Lsa-1-1	NZ_ANAG01000022.1	-	33056	33024	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Lsa-2-1	NZ_AUHQ01000006.1	+	37298	37330	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-869	3300000053_219615	-	205	173	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Lko-1-1	NZ_CP012033.1	-	493955	493923	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Bak-1-1	NZ_BAUV01000003.1	+	60587	60617	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Lsp-3-1	NZ_JPUW01000022.1	+	34339	34372	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→ PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)PRK09328 (PRK09328)→ SUA5 (COG0009)TIGR00057 (TIGR00057)SUA5 (pfam03481)→ LMWPc (smart00226)LMWPAP (cd1634)→ HAMP (smart00304)MA (smart00283)Tar (COG0840)→
Efa-8-1	NZ_KE351649.1	-	195752	195720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Lna-1-1	NZ_AUEG01000014.1	-	9119	9086	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→

Efa-538-1	NZ_ASAM01000214.1	+	9303	9335	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bma-6-1	NZ_HG428742.1	-	441263	441230	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pla-3-1	NZ_LAWY01000043.1	-	5907	5874	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pla-2-1	NZ_CH981517.1	-	2321	2288	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pla-4-1	NC_023134.1	-	3814299	3814266	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pla-5-1	NZ_ADFW01000001.1	+	2677802	2677835	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pal-2-1	NZ_AUGY01000067.1	+	40909	40942	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → DUF3501 (pfam12007) → hypo → hypo → hypo →
env-870	ABMY01031648.1	-	61	28	RNA → hypo →
Pch-3-1	NZ_JUGY01000072.1	-	6755	6722	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → DUF3501 (pfam12007) →
Psp-31-1	NZ_JIAZ01000009.1	-	5052	5019	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
Lpa-2-1	NZ_KB911377.1	-	1976	1944	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Cdi-1-1	NZ_JQLO01000001.1	-	1825701	1825669	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lag-1-1	NZ_LN851172.1	+	41190	41222	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-871	JGI24707J26582_10010170	+	4961	4993	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-872	JGI24708J26588_10015525	-	566	534	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-873	JGI24711J26586_10162716	-	244	212	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ece-1-1	NZ_LDEA01000016.1	+	14732	14764	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ece-1-2	NZ_LDOX01000011.1	+	32174	32206	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ece-1-3	NZ_LDOW01000005.1	-	101274	101242	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ece-1-4	NZ_LDEB01000042.1	-	2043	2011	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ece-1-5	NZ_LDED01000027.1	+	14737	14769	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ece-1-6	NZ_LDEC01000037.1	+	3278	3310	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ece-1-7	NZ_LDDZ01000019.1	-	1843	1811	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ece-2-1	NZ_KI535313.1	+	35980	36012	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ema-3-1	NZ_CVRN01000007.1	+	579351	579383	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-874	JGI26052J44787_1053424	+	319	352	RNA →
Esp-8-1	NZ_JFYW01000008.1	-	343971	343938	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eun-1-1	NZ_KK211188.1	+	424175	424208	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ean-1-1	NC_018665.1	-	2501740	2501707	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ean-2-1	NZ_JMKS01000003.1	-	1069913	1069880	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esi-1-1	NC_010556.1	-	2710763	2710730	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esi-2-1	NZ_KK211190.1	+	331383	331416	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eun-2-1	NZ_KK211187.1	+	420534	420567	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-875	JGI26053J44789_1022240	-	446	413	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-876	JGI26055J44792_1047538	-	417	384	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-877	JGI26057J44791_1003846	-	2204	2171	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-878	JGI26051J44788_1013255	+	79	112	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-879	JGI26052J44787_1019914	-	555	522	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-880	JGI26054J46599_1007412	-	248	215	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eac-1-1	NZ_LFQN01000004.1	-	62759	62726	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eac-2-1	NZ_JNIR01000001.1	-	2404781	2404748	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-11-1	NZ_JTLL01000020.1	+	64609	64642	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-5-1	NC_022794.1	-	2814663	2814630	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-7-1	NZ_BARY01000003.1	+	65109	65142	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-881	JGI26050J44790_1013333	-	517	484	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eox-1-1	NZ_JNIS01000001.1	-	1240167	1240134	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lvi-2-1	NZ_AHYZ01000045.1	-	4802	4770	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lvi-1-1	NZ_AHZA01000166.1	-	3988	3956	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Fge-1-1	NZ_AUMPO1000005.1	+	28726	28757	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apa-1-1	NZ_JYCD01000078.1	-	32801	32767	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bth-46-1	NZ_KE695653.1	-	188547	188513	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Bth-47-1	NZ_JQMH01000003.1	-	220631	220597	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-882	2200565360	-	568	535	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → crypto_DASH (TIGR02765)DNA_photolyase (pfam00875) →
Bsp-74-1	NZ_KI301970.1	-	166095	166062	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bag-1-1	NZ_JATL01000001.1	-	68309	68276	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK10674 (PRK10674)FAD_binding_7 (pfam034)
Bsp-10-1	NZ_AKKB01000126.1	-	33889	33856	hypo → Tdk (COG1435)PRK04296 (PRK04296) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197)
Bag-2-1	NZ_AOBR01000012.1	-	25158	25125	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bpa-4-1	NZ_KI629787.1	+	57528	57561	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → Spore_YhcN_YlaJ (pfam09580) →
Bbr-4-1	NZ_AKYF01000027.1	-	190401	190368	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → P_hrB (COG0415)photolyase_8HDF (TIGR03556)
Bbr-2-1	NZ_LDZV01000001.1	-	5378424	5378391	Tdk (COG1435)PRK04296 (PRK04296) → Spore_YhcN_YlaJ (pfam09580) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → P_hrB (COG0415)photolyase_8HDF (TIGR03556)
Bsp-43-1	NZ_LGJF01000001.1	+	5142336	5142369	Tdk (COG1435)PRK04296 (PRK04296) → Spore_YhcN_YlaJ (pfam09580) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → P_hrB (COG0415)PRK10674 (PRK10674) →
Bbr-3-1	NZ_AHKL01000034.1	+	80549	80582	Tdk (COG1435)PRK04296 (PRK04296) → hypo → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → P_hrB (COG0415)PRK10674 (PRK10674) →
Bbr-1-1	NC_012491.1	-	5785760	5785727	Tdk (COG1435)PRK04296 (PRK04296) → hypo → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → P_hrB (COG0415)PRK10674 (PRK10674) →
Bsp-9-1	NZ_AKIX01000074.1	-	36982	36949	Tdk (COG1435)PRK04296 (PRK04296) → hypo → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → P_hrB (COG0415)photolyase_8HDF (TIGR03556) → P_hrB (COG0415)photolyase_8HDF (TIGR03556) → Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) → Spore_YhcN_YlaJ (pfam09580) → Spore_YhcN_YlaJ (pfam09580) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)PRK09328 (PRK09328) →
Bfo-2-1	NZ_LDCN01000003.1	-	391782	391749	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → P_hrB (COG0415)photolyase_8HDF (TIGR03556)
Bre-1-1	NZ_LGIQ01000009.1	+	2036993	2037026	Tdk (COG1435)PRK04296 (PRK04296) → hypo → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) →
Bbo-4-1	NZ_JXAV01000005.1	-	191334	191300	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bbo-7-1	NZ_JPRB01000009.1	-	190353	190319	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bbo-6-1	NZ_APB01000004.1	-	192154	192120	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bbo-5-1	NZ_JAQG01000025.1	+	126951	126985	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bla-3-1	NZ_CAGD01000009.1	+	76465	76498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bla-4-1	NZ_CP007806.1	-	4868784	4868751	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bla-1-1	NZ_JNFS01000001.1	+	2136709	2136742	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bla-5-1	NZ_AXBT01000034.1	+	271405	271438	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bla-2-1	NZ_KB894284.1	+	113737	113770	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-99-1	NZ_HE978538.1	+	272130	272163	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-45-1	NZ_LIGG01000001.1	+	934797	934765	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bca-1-1	NZ_LAYY01000010.1	-	43036	43004	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aji-1-1	NZ_JH976434.1	-	707904	707873	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmu-1-1	NZ_JSWI01000015.1	+	46921	46954	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → sortase_fam (TIGR01076)Sortase_A (cd06165) →
env-883	DLF014_scaffold12613.4	+	22418	22451	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → sortase_fam (TIGR01076)Sortase_A (cd06165) →
env-884	DOF012_scaffold14126.6	+	21527	21560	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → sortase_fam (TIGR01076)Sortase_A (cd06165) →
env-885	2204848799	-	1517	1484	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → sortase_fam (TIGR01076)Sortase_A (cd06165) →
env-886	2157775506	-	1517	1484	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → sortase_fam (TIGR01076)Sortase_A (cd06165) →
Lmu-2-1	NZ_CP011013.1	-	2121237	2121204	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → sortase_fam (TIGR01076)Sortase_A (cd06165) →
Lmu-1-2	NZ_JROC01000031.1	-	24602	24569	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → hypo →
Lwa-1-1	NZ_AWTT01000003.1	+	39579	39611	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lho-1-1	NZ_AP014680.1	+	411316	411348	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-887	SRS011111_Baylor_scaffold_3888	-	333	301	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lco-3-1	NZ_GG698805.1	+	187441	187473	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lin-6-1	NZ_HE997174.1	+	292603	292635	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-888	2205128598	+	89	121	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-889	2157599913	+	89	121	RNA →
env-890	2158270211	-	125	92	RNA → rpmE (PRK00019)rpmE2 (PRK01678)L31 (TIGR00105)Ribosomal_L31 (pfam01197) →
Lpa-1-1	NZ_LDPB01000046.1	+	40254	40287	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lan-3-1	NZ_GG700738.1	+	134448	134481	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-891	2158307163	-	217	184	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lor-3-1	NZ_AEKL01000068.1	-	23595	23562	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-892	2205774333	-	527	494	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lor-1-1	NZ_AFTL01000008.1	-	55820	55787	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-7-1	NZ_AVAB01000001.1	+	249983	250016	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-893	scaffold63933_1_V1.CD-11	-	667	634	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-1-1	NZ_LAIK01000005.1	-	289790	289757	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-1-2	NZ_LBDH01000005.1	+	42885	42918	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-1-3	NZ_LBDG01000019.1	-	2690	2657	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-5-1	NZ_CBUR010000031.1	-	23728	23695	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-1-4	NZ_JUTH01000116.1	+	4117	4150	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-11-1	NC_017465.1	+	250243	250276	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-12-1	NC_010610.1	+	249776	249809	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-9-1	NZ_GG704707.1	+	45973	46006	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-10-1	NZ_GG669907.1	+	47108	47141	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-3-1	NC_021235.1	+	246048	246081	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-4-1	NZ_KE356737.1	+	45908	45941	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-8-1	NZ_KI546217.1	+	36406	36439	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-2-1	NZ_CP011536.1	+	270394	270427	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfe-6-1	NZ_AWXS01000029.1	+	34177	34210	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-894	scaffold29246_2_V1.CD-11	-	3405	3372	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-895	SRS014343_WUGC_scaffold_819	-	226	193	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-896	DLM027_scaffold17_2	-	19027	18994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-897	2157436120	-	110	77	RNA → hypo →
Lre-12-1	NZ_ACGX02000004.1	+	87043	87076	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lre-9-1	NC_009513.1	+	269553	269586	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lre-5-1	NZ_AEAX01000117.1	+	5106	5139	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lre-10-1	NC_010609.1	+	269373	269406	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lre-11-1	NZ_GG693761.1	+	83277	83310	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lre-4-1	NC_021872.1	+	288927	288960	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lre-1-1	NZ_CP011024.1	+	269552	269585	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-898	Contig9771.1	+	339	372	RNA →
env-899	JGI24707J26582_10423514	-	118	85	RNA →
Lre-13-1	NC_015697.1	+	1423149	1423182	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lre-8-1	NZ_GG693671.1	-	45330	45297	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lva-2-1	NZ_GG693416.1	+	80452	80485	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-900	2157771745	+	128	161	RNA → rpmE (PRK00019)rpmE2 (PRK01678)L31 (TIGR00105)Ribosomal_L31 (pfam01197) →
env-901	CTBMPR_c23	+	46289	46321	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Ate-2-1	NZ_AUMJ01000018.1	-	70832	70800	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bth-45-1	NZ_AODI01000040.1	-	38625	38596	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-45-2	NZ_JHZM01000007.1	-	126566	126537	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-902	JGI26050J44790_1004361	+	1747	1778	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bth-44-1	NZ_JXLU01000136.1	+	78859	78890	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bth-44-2	NZ_JXLR01000022.1	+	37521	37552	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bth-44-3	NZ_JXLS01000066.1	+	66077	66108	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bth-44-4	NZ_JXLT01000090.1	-	39361	39330	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Bth-44-5	NZ_CCRF01000101.1	-	36758	36727	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-903	JGI26050J44790_1000142	-	20101	20070	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bca-2-1	NZ_AODH01000022.1	-	112821	112792	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Pda-2-1	NZ_JANK01000056.1	+	12835	12867	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-904	2205852404	+	261	293	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-905	2157565684	+	721	753	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lsu-2-1	NZ_BACC01000082.1	-	343	311	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmu-3-1	NZ_KB822405.1	-	369578	369546	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-906	2204772568	-	71	39	RNA →
env-907	2158052713	-	71	39	RNA →
Lan-2-1	NZ_GL573157.1	-	796104	796072	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lan-1-1	NZ_JMHU01000004.1	-	157949	157917	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-908	2205292183	-	156	124	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-909	2204671542	-	405	373	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-910	4491487.3_NODE.48029	-	135	103	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-911	DLM009_scaffold15_5	-	432	400	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-912	SRS020869_C3352487	+	513	545	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lru-3-1	NZ_AWYA01000122.1	-	13216	13184	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lru-1-1	NZ_JHAB01000034.1	-	29783	29751	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lru-4-1	NZ_AWYB01000385.1	+	1155	1187	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lru-6-1	NZ_AFOJ01000007.1	-	259420	259388	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lru-2-1	NZ_GL833115.1	+	94026	94058	hypo → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lru-1-2	NZ_JHAJ01000117.1	+	20548	20580	hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lru-5-1	NC_015975.1	+	524423	524455	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-913	JXWR01003518.1	-	29634	29602	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ppe-6-1	NC_008525.1	-	1537440	1537408	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ppe-5-1	NC_022780.1	-	1501615	1501583	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ppe-3-1	NZ_JDVW01000008.1	-	330588	330556	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ppe-4-1	NZ_CAHU01000002.1	+	140218	140250	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Pac-2-1	NZ_AGKB01000010.1	-	350604	350572	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Pac-5-1	NZ_GL397067.1	-	1011122	1011090	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Pac-4-1	NZ_GG730083.1	+	429682	429714	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Pac-1-1	NZ_KB889550.1	+	1414333	1414365	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Pac-3-1	NZ_JAGU01000001.1	+	1340990	1341022	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Plo-1-1	NZ_BANK01000009.1	+	51598	51630	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lco-2-1	NZ_BAMK01000007.1	+	99264	99296	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lce-1-1	NZ_AUHP01000014.1	-	58515	58483	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esa-2-1	NZ_KE136389.1	+	614122	614154	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esa-2-2	NZ_KE136523.1	+	816131	816163	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eph-1-1	NZ_KB946326.1	+	83226	83258	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mpl-1-1	NZ_JSAX01000004.1	-	863	831	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mpl-1-2	NZ_JSAY01000004.1	-	166842	166810	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mpl-1-3	NZ_JSAV01000005.1	-	866	834	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mpl-1-4	NZ_JSBC01000004.1	-	866	834	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mpl-1-5	NZ_JSBA01000004.1	-	597	565	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mpl-1-6	NZ_JSBF01000004.1	-	866	834	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mpl-1-7	NZ_JSBD01000006.1	-	866	834	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mpl-1-8	NZ_JSAW01000002.1	-	1025447	1025415	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mpl-1-9	NZ_JSBE01000004.1	-	857	825	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mpl-2-1	NC_015516.1	-	1279834	1279802	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mpl-3-1	NC_016938.1	+	824026	824058	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Mpl-1-10	NZ_JSAZ01000004.1	-	1471	1439	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mpl-1-11	NZ_JSBB01000006.1	-	626	594	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lsu-1-1	NZ_BALC01000008.1	+	59522	59554	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-914	2205830766	-	165	133	RNA → ←hypo
env-915	2157581444	-	165	133	RNA → ←hypo
Lfa-2-1	NZ_KK036465.1	+	21547	21579	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfa-1-1	NZ_AYGX01000076.1	-	1369	1337	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lor-2-1	NZ_BBJM01000005.1	-	31903	31871	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lma-4-1	NZ_BACN01000090.1	-	11120	11088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-11-1	NZ_LFEE01000004.1	+	26276	26308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-916	2205834061	+	655	687	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-917	JXWR01000016.1	+	2483	2515	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-918	2157560113	+	655	687	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-9-1	NZ_ASJE01000081.1	+	29802	29834	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-10-1	NZ_AXDQ01000018.1	+	2888	2920	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-12-1	NZ_AUTE01000054.1	-	8536	8504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-16-1	NZ_BALV01000016.1	+	25883	25915	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-17-1	NZ_AGR101000003.1	+	112355	112387	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-3-1	NZ_AWTS01000023.1	+	15075	15107	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-4-1	NZ_AVFI01000125.1	-	215	183	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-20-1	NC_004567.2	+	458540	458572	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-5-1	NZ_AYTU01000005.1	-	6825	6793	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-21-1	NC_014554.1	+	434946	434978	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-2-1	NC_021514.1	+	466087	466119	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-19-1	NC_012984.1	+	438813	438845	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-15-1	NZ_GL379763.1	+	506009	506041	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-11-1	NZ_KB644964.1	+	98775	98807	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-18-1	NC_021224.2	+	416447	416479	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-1-1	NZ_CP010528.1	+	455988	456020	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-7-1	NZ_CM002918.1	+	447842	447874	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-14-1	NZ_CM003439.1	+	3104335	3104367	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-8-1	NZ_AVAQ01000014.1	+	3252	3284	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpl-6-1	NZ_AVAI01000131.1	-	14495	14463	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
Lpl-13-1	NC_020229.1	+	683468	683500	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpe-2-1	NZ_CM001538.1	+	477939	477971	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpe-1-1	NZ_LFLY01000001.1	-	100060	100028	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-41-1	NZ_KN173718.1	-	48885	48853	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eit-1-1	NZ_GL622241.1	-	1826854	1826822	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-919	2210741799	+	170	204	RNA →
Vlu-1-1	NZ_AYSH01000010.1	+	32998	33030	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-920	2158154984	+	1083	1115	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-921	2205359904	+	1115	1115	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Tha-1-1	NC_016052.1	+	990867	990899	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Tmu-2-1	NZ_KE384092.1	-	4460	4428	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Tmu-1-1	NZ_JPVT01000082.1	+	2641	2673	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Tmu-3-1	NZ_JPVU01000102.1	+	5752	5784	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-922	4491401.3.NODE.92843	+	4662	4694	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lsa-11-1	NC_017481.1	+	378680	378712	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
Lsa-9-1	NZ_AEBA01000017.1	+	18818	18850	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → hypo →
Lsa-5-1	NZ_AFMN01000001.1	-	7360	7328	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
Lsa-10-1	NZ_GG693222.1	-	64281	64249	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →

Lsa-6-1	NZ_AICL01000001.1	-	7340	7308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
Lsa-8-1	NZ_CP011403.1	+	377103	377135	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
env-923	NLM027_scaffold41938.1	+	38289	38321	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
Lsa-4-1	NZ_AFOI01000007.1	-	10694	10662	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
Lsa-3-1	NZ_CP007646.1	+	359733	359765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → hypo → hypo → hypo →
Lsa-7-1	NZ_CBVR010000053.1	-	1525	1493	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
Pcl-1-1	NC_016605.1	+	219415	219447	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bfo-1-1	NZ_KB894703.1	+	46890	46924	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gic-1-1	NZ_JPYA01000113.1	-	36992	36961	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsu-1-1	NZ_JQMN01000001.1	+	536242	536273	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gth-6-1	NZ_JFHZ01000051.1	-	48767	48736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-16-1	NZ_LDNZ01000071.1	+	7084	7115	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gst-1-1	NZ_LDNS01000203.1	-	1968	1937	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gst-1-2	NZ_LDNT01000178.1	-	1956	1925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gth-1-1	NC_009328.1	-	3431917	3431886	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-2-1	NZ_ABVH01000007.1	-	54857	54826	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Age-1-1	NZ_JYCG01000286.1	-	19333	19302	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gst-1-3	NZ_JQCS01000028.1	-	13433	13402	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gst-1-4	NZ_JPYV01000032.1	-	54116	54085	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-14-1	NZ_CP008903.1	-	1776671	1776640	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-8-1	NZ_CP011832.1	-	3291606	3291575	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gth-4-1	NZ_AYKT01000007.1	+	122211	122242	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gst-1-5	NZ_LDNU01000010.1	+	23005	23036	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gst-3-1	NZ_JALS01000096.1	-	12601	12570	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gka-3-1	NZ_JYCF01000134.1	-	47171	47140	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gka-3-2	NZ_JYBP01000003.1	-	3309423	3309392	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gvu-1-1	NZ_JPOI01000001.1	+	1071989	1072020	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-9-1	NZ_AUXP01000009.1	+	97898	97929	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-7-1	NC_013411.1	-	3495641	3495610	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-6-1	NC_014915.1	-	3501607	3501576	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-1-1	NC_014206.1	-	3537049	3537018	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gst-2-1	NZ_CP008934.1	-	1637831	1637800	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gka-4-1	NZ_BBJV01000020.1	-	289	258	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-18-1	NZ_LDPD01000028.1	-	53895	53864	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gka-2-1	NZ_BASG01000006.1	+	56589	56620	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-15-1	NZ_AYSF01000001.1	-	65897	65866	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-11-1	NZ_JGCJ01000027.1	+	42199	42230	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-10-1	NZ_JHUS01000002.1	-	21989	21958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gka-1-1	NC_006510.1	-	3419800	3419769	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gth-3-1	NC_016593.1	-	3486231	3486200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-12-1	NC_020210.1	-	3468659	3468628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gth-7-1	NZ_BATY01000060.1	+	41926	41957	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-17-1	NZ_ATCO01000040.1	+	14050	14081	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bin-1-1	NZ_JNVC02000013.1	+	220889	220922	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bin-2-1	NZ_JGVU02000005.1	+	287101	287134	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-924	JGI25317J35169_1191885	+	62	94	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-925	JGI25319J35699_1005535	+	969	1001	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → spore_YhcN_YlaJ (TIGR02898) →
env-926	JGI25318J35512_1000658	-	8238	8206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → spore_YhcN_YlaJ (TIGR02898) →
env-927	JGI25321J39296_1018370	+	355	387	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → hypo →
env-928	JGI25320J50211_1070748	-	116	84	RNA → hypo →

env-929	JGI25321J50212.10003866	+	2270	2302	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → spore_YhcN_YlaJ (TIGR02898) →
Aan-1-1	NZ_KE952903.1	-	93698	93667	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ami-1-1	NZ_JYBN01000089.1	-	268857	268826	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ami-1-2	NZ_JYBO01000103.1	+	23763	23794	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ami-1-3	NZ_LGUG01000004.1	+	127332	127363	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aty-1-1	NZ_BBWZ01000002.1	+	104374	104405	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-930	2211283201	+	84	115	RNA →
env-931	2156330801	+	84	115	RNA →
Bma-7-1	NZ_HE978512.1	-	417836	417805	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Jal-1-1	NZ_JXRQ01000028.1	-	38185	38155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Jma-1-1	NZ_CP009416.1	-	2865774	2865744	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Jso-1-1	NZ_JXRP01000009.1	+	567308	567338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Jca-1-1	NZ_JXRR01000001.1	-	1685	1655	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-932	JGI24024J18818.10362070	-	302	268	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-8-1	NZ_ACPC01000050.1	-	203195	203164	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-66-1	NZ_LFEL01000002.1	-	551243	551212	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-933	JGI25151J46595.10000061	-	4986	4953	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-95-1	NZ_CP010075.1	-	3326407	3326374	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bst-1-1	NZ_LDWL01000001.1	-	56445	56412	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bst-1-2	NZ_LDWU01000019.1	-	72041	72008	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bst-1-3	NZ_LDUH01000009.1	+	243731	243764	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-63-1	NZ_LDUQ01000001.1	+	281801	281834	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-4-1	NZ_AMSH01000002.1	-	87481	87448	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) →
Bst-1-4	NZ_LDWS01000018.1	-	87668	87635	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bst-1-5	NZ_LDWI01000005.1	-	421554	421521	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bst-1-6	NZ_LFMM01000007.1	-	76273	76240	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-68-1	NZ_LAVH01000010.1	-	169347	169314	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bpu-3-1	NZ_CP009108.1	-	589531	589498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bpu-3-2	NZ_CP007436.1	-	3366927	3366894	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bpu-3-3	NZ_CP011150.1	-	3353307	3353274	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bso-1-1	NZ_AOFM01000009.1	-	593767	593734	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bso-2-1	NZ_AYTN01000054.1	-	411813	411780	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-2-1	NZ_JYBQ01000001.1	-	358665	358632	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-33-1	NZ_GL635727.1	-	941278	941245	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-11-1	NZ_CP012110.1	-	3865351	3865318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-3-1	NZ_AJLV01000020.1	+	429445	429478	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-4-1	NZ_AJLW01000015.1	-	100805	100772	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-1-1	NC_006270.3	-	3780071	3780038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-1-2	NC_006322.1	-	3779923	3779890	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-7-1	NZ_AMWQ01000015.1	-	37002	36969	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-9-1	NZ_AZSM01000001.1	-	309421	309388	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-8-1	NZ_AZSL01000025.1	+	7611	7644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-2-2	NZ_JFYM01000008.1	+	428524	428557	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-6-1	NZ_AVEZ01000039.1	-	520363	520330	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-85-1	NZ_JZBT01000024.1	+	30280	30313	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bgl-1-1	NZ_LECV01000100.1	+	7406	7439	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-48-1	NZ_LECW01000089.1	+	25275	25308	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-2-3	NZ_LFIM01000002.1	-	153023	152990	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bli-5-1	NC_021362.1	-	3959595	3959562	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-73-1	NZ_JXAP01000005.1	-	592676	592643	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →

Bli-10-1	NZ_AZYP01000003.1	-	89779	89746	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-35-1	NZ_ANNR02000031.1	+	423248	423281	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-82-1	NZ_KE819960.1	-	635927	635894	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bpa-2-1	NZ_CP010524.1	-	3979133	3979100	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-60-1	NZ_LBMN01000080.1	+	48203	48236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bpa-3-1	NZ_AZSK01000014.1	+	416910	416943	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-76-1	NZ_KE819965.1	-	716299	716266	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-98-1	NZ_KB223527.1	-	1669518	1669487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ama-1-1	NZ_LELK01000004.1	+	263335	263366	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Baz-1-1	NZ_AJLR01000149.1	-	16199	16168	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Baz-2-1	NZ_JJRY01000009.1	+	91459	91490	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-7-1	NZ_CH672356.1	+	28004	28034	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bin-3-1	NC_022524.1	-	4499937	4499907	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bse-1-1	NC_014219.1	-	3427416	3427386	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-13-1	NZ_HE610986.1	-	937568	937535	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bch-1-1	NZ_KE386944.1	+	305910	305940	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-934	SR_TP_S2_1011259	-	203	173	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-58-1	NZ_BAWC01000008.1	+	52801	52832	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → hypo
Ble-1-1	NZ_CP003923.1	-	3605244	3605213	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → hypo
Bsp-86-1	NZ_BAWL01000044.1	-	10324	10293	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bcl-1-1	NC_006582.1	-	4034646	4034615	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bcl-2-1	NZ_JMCA01000031.1	+	272380	272411	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bal-1-1	NZ_ALPT02000041.1	-	32350	32319	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bwa-1-1	NZ_BAUT01000070.1	+	16215	16246	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bps-3-1	NZ_LFJO01000001.1	+	460473	460504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-935	JGI25318J35512_1127720	-	223	192	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bhe-1-1	NZ_BAUU01000018.1	+	23923	23954	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bok-1-1	NZ_JRJU01000042.1	-	26874	26843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-56-1	NZ_BAWA01000009.1	+	100911	100942	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → hypo
Bsp-57-1	NZ_BAWB01000007.1	+	27806	27775	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → hypo
Bco-3-1	NZ_ABFU01000064.1	+	21206	21236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Din-1-1	NZ_LAJB01000003.1	-	562219	562188	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dro-1-1	NZ_LAHL01000040.1	-	107117	107086	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Den-1-1	NZ_LAHK01000087.1	-	2617	2586	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Dtu-1-1	NZ_LAJA01000003.1	-	28076	28045	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → HemK (COG2890)RF_mod_PrmC (TIGR03534) → Spore_II_R (pfam09551) → SUA5 (COG0009)TIGR00057 (TIGR00057)SUA5 (pfam03481) →
Bsp-22-1	NZ_KB889752.1	-	2982398	2982367	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → Spore_II_R (pfam09551)
Bsp-25-1	NZ_JQMI01000018.1	-	92785	92754	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)PRK09328 (PRK09328) → Spore_II_R (pfam09551)
Baq-1-1	NZ_CCMN01000031.1	-	310685	310655	RNA → hypo →
Bma-4-1	NZ_LDWO01000012.1	-	159466	159436	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bma-4-2	NZ_LDWH01000003.1	+	320886	320916	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bma-4-3	NZ_LDWJ01000024.1	+	11492	11522	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bma-4-4	NZ_LGUE01000008.1	-	276011	275981	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Baq-1-2	NZ_JXZC01000015.1	-	12969	12939	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bvi-1-1	NZ_CCDN010000007.1	+	193142	193172	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lfl-3-1	NZ_AODF01000010.1	-	26924	26895	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lse-2-1	NZ_JYOM01000013.1	+	11559	11588	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lse-3-1	NZ_CM001051.1	-	2676151	2676122	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-4-1	NZ_CM001049.1	-	2550007	2549978	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Liv-4-1	NZ_CP009576.1	-	2778969	2778940	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Liv-4-2	NZ_CP009575.1	-	2712836	2712807	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-60-1	NZ_APID01000006.1	-	151683	151654	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-48-1	NZ_KK073984.1	+	11327	11356	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-53-1	NZ_KK074072.1	-	99569	99540	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-2-1	NC_013768.1	-	2704320	2704291	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-13-1	NC_017547.1	-	2563087	2563058	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-33-1	NC_021823.1	-	2117345	2117316	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-57-1	NZ_HG813247.1	-	2626503	2626474	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-34-1	NC_013766.2	-	2737889	2737860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-45-1	NZ_KK211194.1	-	179779	179750	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-58-1	NZ_APIB01000006.1	+	47839	47868	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Liv-1-2	NZ_CVPH01000006.1	-	842440	842411	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Liv-1-1	NC_016011.1	-	2607332	2607303	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Liv-2-1	NZ_CP007172.1	-	2653509	2653480	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Liv-3-1	NZ_CP009577.1	-	2653506	2653477	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lwe-1-1	NC_008555.1	-	2535354	2535325	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Laq-1-1	NZ_AOCG01000011.1	-	164581	164552	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-69-1	NZ_APIM01000007.1	-	151862	151833	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-67-1	NZ_APIK01000004.1	+	47841	47870	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-62-1	NZ_APIF01000007.1	-	153381	153352	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-65-1	NZ_API01000006.1	+	47845	47874	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-63-1	NZ_APIG01000008.1	-	113788	113759	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-64-1	NZ_APIH01000007.1	-	153278	153249	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-66-1	NZ_APIJ01000011.1	-	84673	84644	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-59-1	NZ_APIC01000008.1	-	153115	153086	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-68-1	NZ_APIL01000007.1	-	113787	113758	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-17-1	NZ_AARX02000004.1	-	163846	163817	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lmo-11-1	NZ_AARR02000015.1	+	11297	11326	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lmo-7-1	NZ_AARU02000004.1	-	163847	163818	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lmo-9-1	NZ_AARP04000011.1	+	2287	2316	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lmo-46-1	NZ_JHZR01000009.1	-	28003	27974	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-10-1	NZ_AARQ02000005.1	-	151823	151794	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lmo-30-1	NZ_AADQ01000100.1	-	57	28	RNA →
Lmo-56-1	NZ_CBVW010000004.1	-	151863	151834	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-8-1	NZ_AARJ02000005.1	+	11105	11134	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lmo-55-1	NZ_CBVZ010000006.1	-	152406	152377	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-47-1	NZ_JHUY01000011.1	-	182393	182364	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-72-1	NZ_APJT01000001.1	-	2489181	2489152	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-6-1	NC_003210.1	-	2624918	2624889	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-50-1	NZ_KK074038.1	-	152233	152204	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-52-1	NZ_KK074046.1	+	41826	41855	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-26-1	NC_018587.1	-	2636237	2636208	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-39-1	NZ_KN050647.1	-	713680	713651	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-16-1	NC_017545.1	-	2634195	2634166	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-3-1	NC_017544.1	-	2579403	2579374	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-12-1	NC_017546.1	-	2643374	2643345	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-28-1	NC_018593.1	-	2525570	2525541	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-27-1	NC_018592.1	-	2583378	2583349	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-24-1	NC_018589.1	-	2642056	2642027	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-21-1	NC_018588.1	-	2642444	2642415	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-25-1	NC_018586.1	-	2643186	2643157	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Lmo-33-2	NC_021838.1	-	242759	242730	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-33-3	NC_021824.1	-	186543	186514	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-33-4	NC_021837.1	+	850722	850751	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-33-5	NC_021826.1	-	1589345	1589316	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-38-1	NC_022568.1	-	2583826	2583797	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-70-1	NZ_CP007160.1	-	1351849	1351820	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-29-1	NC_018591.1	-	2606775	2606746	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lmo-44-1	NZ_KK211033.1	+	43201	43230	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-61-1	NZ_APIE01000007.1	-	153398	153369	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-2-1	NZ_JZCS01000009.1	+	49208	49237	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-1-1	NC_003212.1	-	2709363	2709334	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-2-2	NZ_JZCU01000001.1	-	177547	177518	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-2-3	NZ_JRYX01000006.1	-	193559	193530	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-14-1	NC_011660.1	+	46092	46121	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-20-1	NC_017537.1	-	2607884	2607855	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-19-1	NC_017529.1	-	2609930	2609901	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lin-3-1	NZ_JH556648.1	+	28282	28311	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-22-1	NC_018590.1	-	2520256	2520227	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lba-1-1	NZ_AGUG01000004.1	-	22582	22553	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lfl-2-1	NZ_ALWW01000045.1	+	21645	21674	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfl-1-1	NZ_AODM01000033.1	+	275	304	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lse-1-1	NC_013891.1	-	2523334	2523305	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-40-1	NZ_CM001469.1	-	2232849	2232820	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-32-1	NZ_AADR01000056.1	-	5830	5801	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Lmo-42-1	NC_021829.1	+	1457392	1457421	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-33-6	NC_021840.1	+	2164270	2164299	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-33-7	NC_021839.1	-	2383018	2382989	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-33-8	NC_021827.1	+	563127	563156	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lgr-2-1	NZ_GL538353.1	+	812725	812754	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lgr-3-1	NZ_AODG01000008.1	+	5832	5861	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lco-1-1	NZ_AODE01000004.1	+	8681	8710	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lro-1-1	NZ_AODK01000010.1	-	13603	13574	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lri-1-1	NZ_AODL01000006.1	-	88179	88150	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lgr-1-1	NZ_AODD01000005.1	+	122902	122931	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lba-2-1	NZ_JNEZ01000001.1	+	49115	49144	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lne-1-1	NZ_JNFB01000007.1	+	9799	9828	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbo-2-1	NZ_JNFA01000028.1	+	27486	27515	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-94-1	NZ_KE384493.1	-	53262	53231	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsm-2-1	NZ_JH414746.1	-	53667	53635	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Tdk (COG1435)PRK04296 (PRK04296)
Bsm-1-1	NZ_CP012024.1	-	3221214	3221182	hypo → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Blo-1-1	NZ_LFZW01000001.1	-	4911598	4911567	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bci-1-1	NZ_KI632498.1	+	78172	78203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pth-2-1	NZ_BAWP01000010.1	-	111204	111173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pth-1-1	NZ_LAKX01000004.1	-	74606	74575	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-4-1	NC_014650.1	-	3717664	3717633	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gth-2-1	NC_015660.1	-	3764572	3764541	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gth-5-1	NZ_CM001483.1	-	3617423	3617392	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bps-1-1	NC_013791.2	-	3665301	3665270	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bma-5-1	NZ_ATAE01000042.1	-	128216	128185	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-66-2	NZ_LFEL01000017.1	-	3671	3640	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-92-1	NZ_AXVA01000010.1	+	75959	75989	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-936	SL_3KL_010_SED_10258389	-	407	377	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Pge-1-1	NZ_CM002692.1	-	3407512	3407481	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pca-1-1	NZ_BAWO01000004.1	-	18666	18635	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Gca-1-1	NZ_AMRO01000071.1	-	76191	76160	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-79-1	NZ_JXAB01000020.1	-	297461	297431	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ben-1-1	NZ_CP011974.1	-	4727388	4727358	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ben-2-1	NZ_ALIM01000035.1	+	148874	148904	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-937	C917852_1	+	160	193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-54-1	NZ_KI912515.1	+	222431	222461	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-30-1	NZ_CCXR01000001.1	-	4062665	4062634	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bba-2-1	NZ_JXLO01000001.1	-	609426	609395	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bba-2-2	NZ_JXLP01000009.1	-	431011	430980	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bkr-1-1	NZ_KE387244.1	+	195969	196000	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-17-1	NZ_KI547188.1	+	304476	304508	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
Bbo-3-1	NZ_BAUW01000047.1	-	11315	11283	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bse-2-1	NZ_BASE01000017.1	-	87101	87069	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsu-11-1	NZ_JXIQ01000068.1	-	277	245	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-37-1	NZ_HG964497.1	-	510465	510434	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bru-1-1	NZ_CCFE01000013.1	-	20014	19983	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bba-3-1	NZ_JWIR02000001.1	+	37168	37199	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Qth-1-1	NZ_JWIR02000025.1	-	127899	127868	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Qth-1-2	NZ_JWJE02000018.1	+	61399	61430	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-40-1	NZ_AYSE01000005.1	+	137089	137120	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-42-1	NZ_LFZU01000001.1	-	3871902	3871871	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-96-1	NZ_CP008855.1	-	1758854	1758824	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bfl-3-1	NZ_JANV01000077.1	+	41386	41417	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-81-1	NZ_LATZ01000128.1	+	256709	256739	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bme-1-1	NC_014103.1	-	4971544	4971513	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
Bfl-1-1	NZ_LFQJ01000038.1	+	103356	103387	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-16-1	NZ_AZVK01000006.1	-	237288	237257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-938	JGI25151.J46595_10060291	-	778	747	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bar-1-1	NZ_JPIE01000004.1	+	106798	106829	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bar-1-2	NZ_JXRC01000013.1	-	240051	240020	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bar-2-1	NZ_JYOO01000022.1	-	64775	64744	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bar-1-3	NZ_JMTL01000003.1	+	275950	275981	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bar-1-4	NZ_LDWN01000019.1	+	134934	134965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bar-1-5	NZ_LDUV01000024.1	+	134934	134965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bme-2-1	NC_014019.1	-	4974394	4974363	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
Bme-3-1	NC_017138.1	+	117060	117091	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
Bme-7-1	NZ_CP009920.1	-	1998706	1998675	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bme-5-1	NZ_KN125581.1	+	150847	150878	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bme-9-1	NZ_CP010586.1	-	5000760	5000729	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bme-8-1	NZ_AHTF01000099.1	-	240086	240055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-29-1	NZ_ANNS01000002.1	+	6424	6455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-80-1	NZ_AXZS01000001.1	-	241083	241052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-20-1	NZ_AZVI01000006.1	+	135180	135211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bfl-2-1	NZ_AZUJ01000010.1	+	127695	127726	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bpa-1-1	NZ_AUMR01000038.1	+	35351	35383	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Ban-4-1	NZ_ABK01000017.1	-	739	707	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-3-1	NZ_ABLT01000007.1	-	8251	8219	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-9-1	NZ_ABJC01000012.1	-	8278	8246	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-8-1	NZ_ABLH01000015.1	-	7672	7640	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-7-1	NZ_ABK01000040.1	-	8162	8130	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)

Ban-6-1	NZ_ABLB01000054.1	-	8201	8169	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-33-1	NZ_AGQP01000037.1	-	62679	62647	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-10-1	NZ_AAEO01000027.3	+	266	298	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-18-1	NZ_AAEP01000040.1	-	8079	8047	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-32-1	NZ_ABDK02000015.1	+	132650	132682	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-14-1	NZ_AAEN01000018.1	+	262	294	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-1-1	NZ_ABDN02000023.1	+	47027	47059	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-26-1	NZ_ANFF01000003.1	-	1790045	1790013	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-27-1	NZ_ANFG01000003.1	-	4312050	4312018	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-39-1	NZ_AZQO01000036.1	-	61859	61827	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-11-1	NC_003997.3	-	5058754	5058722	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-17-1	NC_005945.1	-	5060089	5060057	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-2-1	NC_012472.1	-	5099695	5099663	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-5-1	NC_012659.1	-	5058780	5058748	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-13-1	NC_012581.1	-	5061412	5061380	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-44-1	NC_014335.1	-	5012311	5012279	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-15-1	NC_017729.1	-	5050417	5050385	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-26-1	NC_016779.1	-	5052968	5052936	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-34-1	NZ_CP006742.1	-	5042149	5042117	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-1	NZ_CP008752.1	+	436721	436753	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-28-1	NZ_CP001970.1	-	5059354	5059322	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-29-1	NZ_CP001974.1	-	5059103	5059071	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-2	NZ_CP007618.1	+	4193405	4193437	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-18-2	NZ_CP007666.1	-	3933034	3933002	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-3	NZ_CP007704.1	-	3393140	3393108	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-4	NZ_CP008846.1	-	5044915	5044883	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-25-1	NZ_BAVT01000022.1	-	402375	402343	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-16-1	NZ_AAEO01000042.3	-	254390	254358	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-19-1	NZ_AAER01000027.3	-	85456	85424	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-12-1	NZ_AAES01000044.3	-	7983	7951	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-25-1	NZ_CM000736.1	-	4877394	4877362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-17-1	NZ_CM000757.1	+	4954695	4954727	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-31-1	NZ_KL649663.1	-	404429	404397	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-104-1	NZ_JH792132.1	+	255191	255223	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-24-1	NZ_CM002398.1	-	5063652	5063620	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-5	NZ_CP010342.1	-	5058896	5058864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-2-1	NC_007530.2	-	5058880	5058848	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-7-1	NZ_CM000754.1	-	4909086	4909054	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-6	NZ_CP009325.1	+	150594	150626	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-7	NZ_CP009328.1	-	3853585	3853553	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-8	NZ_CP009331.1	+	1617335	1617367	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-9	NZ_CP010792.1	-	5058855	5058823	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-10	NZ_CP009341.1	-	2358106	2358074	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-11	NZ_CP010813.1	-	5058858	5058826	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-12	NZ_CP009464.1	+	1265383	1265415	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-13	NZ_CP009544.1	-	5118540	5118508	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-37-1	NZ_CP009315.1	-	1636902	1636870	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-14	NZ_CP009700.1	+	2531860	2531892	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-85-1	NZ_CP009300.1	+	4697208	4697240	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-2-2	NZ_CP009318.1	-	5169359	5169327	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-15	NZ_CP009476.1	+	2929400	2929432	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Ban-21-16	NZ_CP009902.1	+	2026472	2026504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)

Ban-21-17	NZ_CP009697.1	-	3050717	3050685	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ban-21-18	NZ_CP010322.1	-	2776009	2775977	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ban-17-2	NZ_CP009541.1	+	2794066	2794098	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ban-38-1	NZ_CP009598.1	+	5033290	5033322	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ban-21-19	NZ_CP009981.1	+	4660357	4660389	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ban-21-20	NZ_CP010852.1	-	113594	113562	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ban-23-1	NZ_CM002401.1	-	5059774	5059742	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ban-22-1	NZ_CM002395.1	-	5059426	5059394	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-23-1	NZ_CM000716.1	-	4974285	4974253	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ban-32-1	NZ_CAVE010000038.1	-	61746	61714	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ban-35-1	NZ_CAVC010000043.1	-	61881	61849	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ban-36-1	NZ_CAVD010000049.1	-	61891	61859	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ban-30-1	NZ_AMDT01000019.1	-	27183	27151	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-63-1	NZ_JH792376.1	+	195540	195572	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-939	JGI25159J45721_1011137	+	238	270	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-940	JGI25151J46595_10014267	-	737	705	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bps-2-1	NZ_CM000745.1	-	4565126	4565094	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bmy-2-1	NZ_CM000743.1	+	4269323	4269355	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bmy-3-1	NZ_CM000744.1	-	4468592	4468560	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-26-1	NZ_KB895693.1	+	28519	28551	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-14-1	NZ_KB895568.1	+	173140	173172	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-142-1	NZ_KB976905.1	-	423230	423198	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-127-1	NZ_KB976717.1	-	420881	420849	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-140-1	NZ_KB976864.1	-	344767	344735	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bmy-4-1	NZ_CP009651.1	+	2534010	2534042	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bmy-4-2	NZ_CP007626.1	-	2305106	2305074	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bma-2-1	NZ_JOTN01000001.1	-	308890	308858	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bcy-2-1	NZ_JYPG01000024.1	-	242719	242687	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bcy-1-1	NC_009674.1	-	3909710	3909678	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-39-1	NZ_JH921519.1	-	365021	364989	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bdi-1-1	NZ_HG942082.1	-	119037	119005	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bfi-1-1	NZ_LDWQ01000106.1	-	1219	1189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bba-1-1	NZ_AJLS01000139.1	-	4099	4069	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bni-1-1	NZ_BAWM01000007.1	-	1879	1849	Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-53-1	NZ_JAEL01000147.1	-	1653	1623	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Age-1-2	NZ_JYCG01000013.1	+	44653	44684	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ate-1-1	NZ_JHVN01000001.1	-	392015	391984	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bce-6-1	NZ_CM000739.1	+	4869077	4869109	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-106-1	NZ_KE504110.1	+	260069	260101	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-108-1	NZ_KE504107.1	+	259819	259851	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-107-1	NZ_JH636004.1	+	259670	259702	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-941	JGI25151J46595_10017439	+	2866	2898	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-40-1	NZ_CM000733.1	+	4212588	4212620	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-91-1	NZ_AXVB01000011.1	+	29512	29544	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-942	JGI25151J46595_10061557	-	473	441	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-89-1	NZ_JQKQ01000011.1	-	200394	200362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-15-1	NZ_KB910926.1	+	143065	143097	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bga-1-1	NZ_JOTM01000002.1	-	410823	410791	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-943	JGI12273J12029_10707276	+	98	128	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-944	JGI25159J45721_1056023	-	243	211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-31-1	NZ_AMXT02000005.1	+	2115	2147	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Bth-29-1	NZ_ARXZ02000005.1	-	247882	247850	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-70-1	NZ_JXIT01000003.1	+	4627	4659	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-49-1	NZ_CAVI010000079.1	+	24082	24114	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-69-1	NZ_JXIS01000025.1	-	246925	246893	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-87-1	NZ_JSFD01000003.1	+	203781	203813	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-40-1	NZ_JWJY01000024.1	-	60949	60917	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Spn-1-1	NZ_CVOG01000306.1	-	327	295	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-5-1	NZ_ABDA02000004.1	-	370284	370252	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-28-1	NZ_AAEK01000096.1	+	280	312	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-43-1	NZ_ABCZ02000035.1	+	6718	6750	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bsp-51-1	NZ_AYMM01000025.1	+	100909	100941	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-27-1	NZ_AYPV01000046.1	-	235676	235644	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Spn-1-2	NZ_CKVP01000064.1	-	2654	2622	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-26-1	NZ_AYSM01000032.1	-	413082	413050	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Spn-1-3	NZ_CLRF01000045.1	-	5931	5899	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bmy-6-1	NZ_ASPZ01000051.1	+	183225	183257	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-32-1	NZ_AMXS02000116.1	+	31044	31076	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsu-13-1	NZ_AZNI01000006.1	+	152247	152279	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Spn-1-4	NZ_CLBL01000054.1	+	4140	4172	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Spn-1-5	NZ_CKVY01000040.1	+	5832	5864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-43-1	NZ_AYXQ01000009.1	-	85575	85543	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Spn-1-6	NZ_CMDP01000044.1	+	4474	4506	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-35-1	NZ_JEOC01000013.1	-	7003	6971	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-12-1	NC_005957.1	-	5064430	5064398	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-16-1	NC_004722.1	-	5237467	5237435	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-24-1	NC_006274.1	-	5128915	5128883	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-29-1	NC_011772.1	-	5199166	5199134	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-33-1	NC_011969.1	-	5036818	5036786	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-13-1	NC_011773.1	-	5118565	5118533	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-15-1	NC_003909.8	-	5038240	5038208	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-9-1	NC_011658.1	-	5092666	5092634	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-10-1	NC_017200.1	-	5177466	5177434	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-9-1	NC_017208.1	-	5312273	5312241	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-31-1	NC_016771.1	-	5044989	5044957	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-2-1	NC_018877.1	-	5325945	5325913	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-24-1	NC_018508.1	-	4822974	4822942	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-38-1	NC_020238.1	-	5466196	5466164	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-3-1	NC_018500.1	+	4315030	4315062	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-42-1	NC_020376.1	-	5315959	5315927	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-6-1	NC_018693.1	-	4426098	4426066	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-27-1	NC_018491.1	+	1766387	1766419	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bto-1-1	NC_022781.1	-	2454301	2454269	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-39-1	NZ_CP004858.1	-	5422066	5422034	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-39-2	NZ_CP007607.1	+	517856	517888	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-37-1	NZ_CP004870.1	-	5435621	5435589	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bbo-2-1	NZ_CP007512.1	-	4973045	4973013	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-36-1	NZ_CM000728.1	-	5006615	5006583	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-12-1	NZ_CM000738.1	-	4797858	4797826	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-17-1	NZ_CM000721.1	+	5030069	5030101	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-11-1	NZ_CM000756.1	+	5063643	5063675	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-8-1	NZ_CM000753.1	+	4929359	4929391	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)

Bce-37-1	NZ_CM000730.1	-	4893712	4893680	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-14-1	NZ_CM000752.1	-	5032858	5032826	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-41-1	NZ_CM000735.1	+	4903796	4903828	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-3-1	NZ_CM000717.1	-	4853496	4853464	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-46-1	NZ_CM000722.1	-	4959910	4959878	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-34-1	NZ_CM000720.1	+	4913556	4913588	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-14-1	NZ_CM000715.1	-	5133278	5133246	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-16-1	NZ_CM000755.1	+	4886738	4886770	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-4-1	NZ_CM000758.1	+	5153478	5153510	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-18-1	NZ_CM000748.1	+	4896324	4896356	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-38-1	NZ_CM000731.1	-	4919707	4919675	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-21-1	NZ_CM000723.1	+	5024748	5024780	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-15-1	NZ_CM000750.1	-	4887859	4887827	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-42-1	NZ_CM000734.1	-	5035278	5035246	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-35-1	NZ_CM000729.1	+	4857814	4857846	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-21-1	NZ_KK088334.1	-	242518	242486	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-14-2	NZ_KN050654.1	-	491347	491315	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-45-1	NZ_CM000714.1	-	4850950	4850918	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bsp-11-1	NZ_JH414711.1	+	182856	182888	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-69-1	NZ_JH791968.1	-	5087536	5087504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-131-1	NZ_JH792156.1	+	248131	248163	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-55-1	NZ_JH792223.1	-	409655	409623	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-49-1	NZ_JH792265.1	+	266039	266071	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-134-1	NZ_JH791855.1	-	412679	412647	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-115-1	NZ_JH792025.1	-	5004746	5004714	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-67-1	NZ_JH791899.1	+	254004	254036	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-87-1	NZ_JH804653.1	+	246240	246272	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-121-1	NZ_JH792240.1	+	257458	257490	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-71-1	NZ_JH791951.1	-	4892243	4892211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-52-1	NZ_JH792321.1	+	243223	243255	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-111-1	NZ_JH792105.1	+	243201	243233	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-138-1	NZ_JH791819.1	-	5219376	5219344	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-77-1	NZ_JH804624.1	+	259696	259728	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-96-1	NZ_JH804690.1	+	254845	254877	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-73-1	NZ_JH791945.1	-	4359897	4359865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-97-1	NZ_JH792136.1	-	384123	384091	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-72-1	NZ_JH804617.1	+	315988	316020	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-113-1	NZ_JH792018.1	+	281199	281231	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-99-1	NZ_JH792120.1	-	5021047	5021015	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-133-1	NZ_JH791865.1	+	265832	265864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-117-1	NZ_JH792282.1	+	186404	186436	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-123-1	NZ_JH792166.1	+	257716	257748	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-132-1	NZ_JH791884.1	-	152349	152317	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-135-1	NZ_JH791833.1	-	4979784	4979752	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-118-1	NZ_JH792081.1	-	393135	393103	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-70-1	NZ_JH791942.1	-	5132776	5132744	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-94-1	NZ_JH804683.1	+	440203	440235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-112-1	NZ_JH792039.1	+	21430	21462	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-86-1	NZ_CM001787.1	-	5054594	5054562	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-22-1	NZ_CM001804.1	-	5584093	5584061	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bth-22-2	NZ_CM001804.1	-	5582913	5582881	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-95-1	NZ_KB976627.1	-	250768	250736	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)

Bce-60-1	NZ_KB976517.1	-	5040982	5040950	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-81-1	NZ_KB976593.1	+	263858	263890	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-61-1	NZ_KE332507.1	-	5030046	5030014	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-114-1	NZ_KB976039.1	+	263486	263518	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-126-1	NZ_KB976184.1	-	868527	868495	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-98-1	NZ_KB976545.1	-	220766	220734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-58-1	NZ_KB976220.1	+	193877	193909	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-23-1	NZ_HG810020.1	-	443455	443423	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-89-1	NZ_KB976661.1	-	379081	379049	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-102-1	NZ_KB976311.1	-	1309599	1309567	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-128-1	NZ_KB976808.1	-	405722	405690	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-147-1	NZ_KB976117.1	-	411767	411735	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-125-1	NZ_KB976650.1	-	386069	386037	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-57-1	NZ_KB976207.1	-	5024371	5024339	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-103-1	NZ_KB976769.1	-	440019	439987	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-54-1	NZ_KB976160.1	+	255650	255682	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-75-1	NZ_KB976554.1	-	419271	419239	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-137-1	NZ_KB976266.1	-	422107	422075	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-53-1	NZ_KE332537.1	-	411040	411008	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-59-1	NZ_KB976237.1	-	4422472	4422440	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-136-1	NZ_KB976843.1	-	70671	70639	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-13-1	NZ_CM000751.1	+	4809697	4809729	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-5-1	NZ_CM000759.1	+	4781622	4781654	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-34-1	NZ_CP010106.1	-	5260251	5260219	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-47-1	NZ_CP009941.1	+	100239	100271	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-33-1	NZ_CP010089.1	-	5435610	5435578	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-20-1	NC_008600.1	-	5087437	5087405	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-1-1	NC_014171.1	-	5149570	5149538	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-139-1	NZ_KB976695.1	-	4408716	4408684	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-105-1	NZ_KB976300.1	+	263669	263701	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-101-1	NZ_KB976325.1	-	1320401	1320369	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-30-1	NC_022873.1	-	5825716	5825684	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-28-2	NZ_CP009590.1	+	2646537	2646569	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-17-2	NZ_CP009628.1	+	2800811	2800843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-47-2	NZ_CP009596.1	+	3811663	3811695	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-48-1	NZ_CP009641.1	-	3825469	3825437	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-47-3	NZ_CP009369.1	+	5167894	5167926	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-24-2	NZ_CP009968.1	+	333073	333105	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-25-1	NZ_CP009351.1	+	4083244	4083276	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-47-4	NZ_CP009605.1	+	4356486	4356518	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-36-1	NZ_CP010005.1	+	361032	361064	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-41-1	NZ_CP010577.1	-	5464481	5464449	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-28-1	NZ_KN849185.1	-	117278	117246	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-47-5	NZ_CP009686.1	-	5177931	5177899	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bth-19-1	NZ_CM000746.1	+	5020833	5020865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-19-1	NZ_CM000726.1	-	4943444	4943412	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-22-1	NZ_CM000724.1	+	4921172	4921204	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-39-1	NZ_CM000732.1	+	4928815	4928847	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-4-1	NZ_CM000727.1	+	4964402	4964370	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-100-1	NZ_KE150020.1	+	186887	186919	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-18-1	NC_011725.1	-	5245447	5245415	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Spn-1-7	NZ_CRRFT01000061.1	+	4487	4519	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-945	3300000053_144823	-	80	50	RNA → hypo →
Bsp-21-1	NZ_GL635751.1	-	651664	651634	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Boc-1-1	NZ_ALEG01000028.1	+	150357	150387	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bfi-2-1	NZ_APVL01000003.1	-	169647	169617	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgl-1-1	NZ_LGUF01000007.1	+	808393	808423	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-44-1	NZ_LIGI01000001.1	-	4212263	4212232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-946	JGI25159J45721_1006073	+	2550	2582	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-947	JGI25151J46595_10041049	+	116	148	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-64-1	NZ_LDUK01000040.1	-	27734	27702	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-50-1	NZ_AYMH01000001.1	+	178427	178459	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bwe-2-1	NZ_JNLY01000008.1	+	176304	176336	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bmy-5-1	NZ_ASFY01000107.1	-	7718	7686	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bwe-1-1	NC_010184.1	-	5092651	5092619	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bmy-7-1	NZ_BAUY01000041.1	-	41558	41526	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-91-1	NZ_KB976154.1	-	405933	405901	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-10-1	NZ_CM000737.1	+	4934442	4934474	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-11-1	NZ_CM000719.1	-	4835424	4835392	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-20-1	NZ_CM000725.1	+	4915535	4915567	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-30-1	NZ_CM000718.1	+	5004963	5004995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-7-1	NZ_CM000740.1	-	4811048	4811016	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bmy-1-1	NZ_CM000742.1	+	4692039	4692071	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-8-1	NZ_CM000741.1	+	4823193	4823225	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Bce-83-1	NZ_JH792011.1	-	5058984	5058952	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-144-1	NZ_JH791809.1	-	4517571	4517539	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-110-1	NZ_JH792113.1	+	2442694	2442726	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-84-1	NZ_JH791991.1	+	263206	263238	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-93-1	NZ_JH792148.1	+	254398	254430	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-119-1	NZ_JH792311.1	+	243877	243909	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-90-1	NZ_JH792097.1	-	5038004	5037972	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-120-1	NZ_JH792251.1	+	232233	232265	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-143-1	NZ_JH791837.1	+	232980	233012	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-82-1	NZ_JH804642.1	-	5078164	5078132	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-146-1	NZ_JH791802.1	+	495409	495441	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-88-1	NZ_JH804673.1	+	262212	262244	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-80-1	NZ_JH791985.1	+	199165	199197	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-122-1	NZ_JH792233.1	-	403322	403290	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-64-1	NZ_JH791910.1	+	261506	261538	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-76-1	NZ_JH791976.1	+	253248	253280	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-79-1	NZ_JH804637.1	-	4782587	4782555	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-65-1	NZ_JH791914.1	+	33644	33676	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-68-1	NZ_JH791923.1	+	273803	273835	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-74-1	NZ_JH791996.1	+	184561	184593	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-78-1	NZ_JH804628.1	-	2665814	2665782	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-56-1	NZ_JH792182.1	+	234573	234605	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-66-1	NZ_KB976982.1	-	397475	397443	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-124-1	NZ_KB976800.1	-	1744786	1744754	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-92-1	NZ_KB976147.1	+	190193	190225	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-116-1	NZ_KB976281.1	-	389591	389559	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-109-1	NZ_KB976394.1	+	45840	45872	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-50-1	NZ_KB976960.1	-	380250	380218	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-130-1	NZ_KB976678.1	-	402912	402880	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Bce-141-1	NZ_KB976199.1	+	251413	251445	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-145-1	NZ_KB976714.1	-	422602	422570	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-51-1	NZ_KB976291.1	-	415314	415282	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-129-1	NZ_KE150047.1	+	205009	205041	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bmy-4-3	NZ_CP009746.1	+	4223781	4223813	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bce-62-1	NZ_KB976530.1	+	248857	248889	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bmy-4-4	NZ_CP009692.1	+	659279	659311	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Afl-1-1	NC_011567.1	-	2710818	2710787	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Afl-3-1	NZ_APCD01000007.1	-	45792	45761	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)RF_mod_PrmC (TIGR03534) → Spore_II_R (pfam09551)
Ath-1-1	NZ_JXTH01000088.1	+	6006	6037	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Afl-6-1	NZ_KN127223.1	-	319655	319624	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)RF_mod_PrmC (TIGR03534) → Spore_II_R (pfam09551)
Afl-4-1	NZ_BARH01000011.1	-	11777	11746	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)RF_mod_PrmC (TIGR03534) → Spore_II_R (pfam09551)
Afl-5-1	NZ_KB205935.1	-	2540628	2540597	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Asp-3-1	NZ_JPZN01000073.1	+	26746	26777	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)RF_mod_PrmC (TIGR03534) → Spore_II_R (pfam09551)
Ago-1-1	NZ_CP012152.1	-	2661090	2661059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)RF_mod_PrmC (TIGR03534) → Spore_II_R (pfam09551)
Aka-1-1	NZ_ALJT01000059.1	-	42386	42355	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)RF_mod_PrmC (TIGR03534) → Spore_II_R (pfam09551)
Asp-2-1	NZ_ANMT01000010.1	-	18982	18951	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PrfA (COG0216)prfA (PRK00591) → HemK (COG2890)RF_mod_PrmC (TIGR03534) → Spore_II_R (pfam09551)
Afl-2-1	NZ_JPZO01000009.1	+	56873	56904	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
Aay-1-1	NZ_JXTG01000005.1	+	108572	108603	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Asp-4-1	NZ_ANOC01000013.1	-	1020	989	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Asp-1-1	NZ_JRLC01000005.1	+	88913	88944	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-18-1	NC_021171.1	-	4666274	4666244	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bje-1-1	NZ_CCAS01000008.1	-	57067	57037	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bme-4-1	NZ_AFEU01000002.1	+	535147	535177	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) →
Bvi-2-1	NZ_LDNB01000013.1	-	34089	34059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bvi-3-1	NZ_ALAN01000227.1	-	990	960	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-948	JGI12467J12023_1238085	+	6	36	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-55-1	NZ_CCYL01000041.1	+	25429	25459	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bme-10-1	NZ_CP007739.1	-	3209895	3209865	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-90-1	NZ_KK366020.1	+	182519	182549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bal-4-1	NZ_JYCE01000071.1	+	107377	107408	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bce-1-1	NC_014829.1	-	4418863	4418833	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-949	JGI12273J12029_10233837	+	19	49	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-950	JGI12273J12029_10168107	+	25	55	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bgi-2-1	NZ_JAGM01000007.1	+	56131	56162	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bgi-1-1	NZ_JRUN01000002.1	-	45090	45059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-951	JGI26050J44790_1003763	-	2351	2320	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bco-9-1	NZ_GL995240.1	-	74763	74732	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-952	JGI26053J44789_1114936	-	54	23	RNA → ← hypo
env-953	JGI26052J44787_1127615	-	54	23	RNA → ← hypo
Bco-1-1	NC_015634.1	-	2895571	2895540	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bco-6-1	NZ_CP009709.1	-	2007760	2007729	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bco-7-1	NZ_ANAQ01000305.1	-	8529	8498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bco-5-1	NZ_AXVW01000015.1	-	43301	43270	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-954	JGI26050J44790_1001615	+	5122	5153	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-955	JGI26051J44788_1000227	-	27870	27839	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-956	JGI26053J44789_1000222	+	6061	6092	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-957	JGI26052J44787_1000106	+	3807	3838	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bco-4-1	NZ_CP010525.1	+	190910	190941	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bco-4-2	NZ_CP011939.1	-	899232	899201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bco-8-1	NZ_JSUI01000029.1	-	42813	42782	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bal-4-2	NZ_JYCE01000129.1	+	44156	44188	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bps-4-1	NZ_AJTN02000012.1	+	1662	1692	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bac-1-1	NZ_KB893980.1	-	42221	42189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → hypo
Bbu-1-1	NZ_LGYA01000005.1	+	190988	191018	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-958	JGI25151J46595_10101225	-	365	335	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsi-3-1	NZ_KN360957.1	-	114752	114722	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-19-1	NZ_JVPL01000166.1	-	5209	5179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-23-1	NZ_JVGU01000213.1	+	50658	50688	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lwe-2-1	NZ_AODJ01000048.1	+	3854	3883	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-47-1	NZ_LFZV01000001.1	+	123654	123684	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bko-1-1	NZ_LILC01000037.1	-	253710	253680	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-28-1	NZ_CAPG01000064.1	-	31592	31559	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bbo-1-1	NZ_JHYI01000015.1	+	60410	60441	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-62-1	NZ_ANNK01000010.1	+	7189	7219	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssp-6-1	NZ_LFKO01000001.1	-	486806	486777	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sxy-3-1	NZ_ANMR01000002.1	+	49266	49295	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1739-1	NZ_JBBJ01000003.1	-	216439	216410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1769-1	NZ_KI992435.1	-	25185	25156	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1679-1	NZ_KI967511.1	-	112495	112466	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1491-1	NZ_KI971326.1	-	56746	56717	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1693-1	NZ_KI968014.1	-	35351	35322	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1542-1	NZ_KI971399.1	-	61596	61567	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1546-1	NZ_KK013510.1	-	216438	216409	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1575-1	NZ_KK014639.1	-	35451	35422	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1532-1	NZ_KK012782.1	-	216438	216409	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1880-1	NZ_KI985727.1	-	216439	216410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1592-1	NZ_KK015414.1	-	216633	216604	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1618-1	NZ_KK016761.1	-	216617	216588	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1602-1	NZ_KK015955.1	-	64567	64538	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1573-1	NZ_KK014537.1	-	58791	58762	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1639-1	NZ_KK017820.1	-	217330	217301	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1595-1	NZ_KK015575.1	-	35621	35592	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-305-1	NZ_AZJQ01000024.1	-	16337	16308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-959	JGI25842J50178_100820	-	933	904	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
Sma-1-1	NZ_JH815597.1	+	44577	44606	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sma-2-1	NZ_AMSQ01000012.1	+	44261	44232	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Smi-1-1	NZ_JXWY01000016.1	+	12700	12729	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sco-3-1	NZ_LAQN01000018.1	+	45418	45447	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-8-1	NZ_LAIU01000009.1	+	42687	42716	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-3-1	NC_012121.1	-	1639890	1639861	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-960	SRS024482_C750297	+	80	109	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-7-1	NZ_JXXP01000003.1	+	44879	44850	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Swa-2-1	NZ_JVOH01000089.1	+	43702	43731	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-3-1	NZ_GG696776.1	-	44864	44835	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-961	2204530485	-	260	231	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-1	NZ_JVVH01000157.1	+	44024	44053	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-2	NZ_JWAZ01000042.1	-	19537	19508	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sca-5-3	NZ_JVAJ01000041.1	+	44028	44057	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-4	NZ_JVOP01000070.1	+	37095	37124	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-5	NZ_JVCF01000017.1	+	44034	44063	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-6	NZ_JVEM01000037.1	+	44014	44043	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-7	NZ_JUXY01000026.1	-	18262	18233	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-8	NZ_JVGZ01000010.1	+	43166	43195	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-9	NZ_JWFD01000012.1	-	18272	18243	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-10	NZ_JWDH01000031.1	-	44279	44250	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-11	NZ_JWED01000063.1	+	44037	44066	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-12	NZ_JVXS01000017.1	+	44023	44052	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-13	NZ_JUZV01000013.1	-	18262	18233	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Swa-2-2	NZ_JVCA01000015.1	+	43256	43285	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-14	NZ_JZUS01000030.1	-	18266	18237	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-15	NZ_JUYG01000060.1	-	18397	18368	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-16	NZ_JUXJ01000067.1	-	18197	18168	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-17	NZ_JUYU01000011.1	+	44037	44066	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-18	NZ_JUPO01000096.1	-	18246	18217	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-19	NZ_JUVR01000034.1	+	25145	25174	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-20	NZ_CVUF01000004.1	-	44302	44273	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-1-1	NZ_ACFR01000009.1	-	44309	44280	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sca-11-1	NZ_AFTX01000024.1	-	44300	44271	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-2-1	NZ_GL545276.1	-	45468	45439	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sca-10-1	NZ_AJTH01000006.1	+	43719	43748	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-9-1	NZ_HG737333.1	+	976669	976698	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-6-1	NZ_CP007601.1	-	1335238	1335209	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssp-8-1	NZ_JMGB01000004.1	-	44292	44263	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-5-21	NZ_JGYJ01000035.1	+	44028	44057	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sca-4-1	NZ_ANAM01000008.1	-	746220	746191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sse-1-1	NZ_LAYZ01000002.1	+	453097	453126	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sha-3-1	NZ_CP011366.1	-	2293755	2293726	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sal-1-1	NZ_ARQJ01000026.1	-	43414	43385	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sep-24-1	NZ_ATDF02000020.1	+	416334	416363	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-25-1	NZ_ATDE02000029.1	-	44595	44566	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-32-1	NZ_ATCX020000207.1	-	29244	29215	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-87-1	NZ_ATDG02000039.1	+	247203	247232	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-88-1	NZ_ATDH02000068.1	-	1665536	1665507	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-34-1	NZ_ATCZ020000376.1	-	26212	26183	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-33-1	NZ_ATCY02000151.1	+	36943	36972	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-26-1	NZ_ATCW02000120.1	+	37472	37501	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-20-1	NZ_ATCU02000163.1	+	37472	37501	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-64-1	NZ_ATDA02000118.1	-	202474	202445	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-52-1	NZ_AKGX01000053.1	-	46122	46093	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-78-1	NZ_AHLB01000045.1	-	45382	45353	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-28-1	NZ_AENR01000048.1	-	45384	45355	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-65-1	NZ_KE367254.1	+	1492	1521	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-21-1	NZ_KE365561.1	+	6822	6851	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-8-1	NZ_CP009046.1	+	687865	687836	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-962	JGI26050J44790_1048163	+	124	153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-963	JGI26053J44789_1028520	+	99	128	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-964	JGI26055J44792_1004441	+	1972	2001	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-965	JGI26057J44791_1004975	+	2013	2042	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-966	JGI26054J46599_1003011	+	3005	3034	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-967	JGI26054J46599_1013284	+	556	585	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssc-3-1	NZ_LEOS01000012.1	-	44440	44411	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssc-4-1	NZ_JANE01000008.1	+	23593	23622	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sco-1-1	NZ_AYOS02000031.1	+	49441	49470	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sco-2-1	NZ_LAKJ01000007.1	-	19353	19324	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssp-11-1	NZ_ALOZ01000051.1	+	21417	21446	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-1	NZ_JWBV01000049.1	-	19534	19505	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-1-1	NZ_ACLP01000009.1	+	36054	36083	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-2-1	NZ_GL545257.1	+	36461	36490	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-255-1	NZ_KK222755.1	-	45892	45863	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-968	SRS015381_WUGC_scaffold.18506	-	443	414	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-969	SRS015937_C169098	+	201	230	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-970	SRS016752_C178754	+	488	517	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-971	SRS017851_Baylor_scaffold.8802	-	406	377	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-972	SRS018978_WUGC_scaffold.15620	-	7277	7248	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-973	SRS019015_WUGC_scaffold.1731	+	3050	3079	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-974	SRS019033_C268848	+	114	143	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-975	SRS019064_WUGC_scaffold.6269	+	5563	5592	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-976	SRS019081_WUGC_scaffold.29513	+	2508	2537	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-977	SRS020263_C2700470	+	162	191	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-978	SRS020386_C348936	+	3349	3378	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-979	SRS022006_C151996	-	510	481	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-980	SRS023847_Baylor_scaffold.786	-	3438	3409	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-981	SRS024424_C245768	+	366	395	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-982	SRS024482_C760912	+	1367	1396	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-983	SRS024598_C1602584	-	406	377	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-984	SRS024620_C112548	+	227	256	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-985	SRS024655_LANL_scaffold.2040	+	198	227	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-986	SRS047225_C228287	-	184	155	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-987	SRS058221_C352952	-	181	152	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-988	LWFCAn2_GMINUVW02I5FNM	+	286	315	RNA → RpmE (COG0254)rpmE (PRK00019)rpmE2 (PRK01678)L31 (TIGR00105) →
env-989	GMINUVW02I5FNM	+	286	315	RNA → ← hyp0
Sep-73-1	NZ_AGUB01000039.1	-	45436	45407	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-79-1	NZ_AHLC01000046.1	-	45370	45341	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-27-1	NZ_AURC01000030.1	-	45614	45585	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-68-1	NZ_AFEH01000030.1	-	45376	45347	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-8-2	NZ_JWEE01001238.1	+	36923	36952	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ecl-1-1	NZ_JUOF01000855.1	-	2934	2905	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-67-1	NZ_ATDD02000322.1	-	45352	45323	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-66-1	NZ_ATDC02000013.1	+	455134	455163	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-12-1	NZ_ARWU01000119.1	+	37127	37156	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-18-1	NZ_AMSJ01000011.1	-	45378	45349	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-54-1	NZ_AKGS01000031.1	-	45430	45401	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-44-1	NZ_AKHC01000051.1	-	45770	45741	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-71-1	NZ_AFEI01000056.1	-	45365	45336	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-42-1	NZ_AKHH01000041.1	-	45857	45828	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-83-1	NZ_AHLH01000072.1	+	37358	37387	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-30-1	NZ_AJJS01000025.1	-	45803	45774	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-60-1	NZ_AKGM01000033.1	-	45003	44974	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-50-1	NZ_AKGV01000047.1	-	45770	45741	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-55-1	NZ_AKGR01000047.1	-	45779	45750	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-56-1	NZ_AKQQ01000033.1	-	45918	45889	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sep-49-1	NZ_AKGW01000040.1	-	42734	42705	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-43-1	NZ_AKHG01000037.1	+	37775	37804	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-45-1	NZ_AKHB01000044.1	-	45769	45740	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-40-1	NZ_AKHL01000049.1	-	45769	45740	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-75-1	NZ_AFTZ01000029.1	-	45374	45345	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-86-1	NZ_AFED01000053.1	+	37355	37384	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-46-1	NZ_AKHA01000034.1	-	45852	45823	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-37-1	NZ_AKHE01000040.1	-	45851	45822	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-35-1	NZ_AKHJ01000042.1	-	45795	45766	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-9-1	NZ_JNLI01000004.1	-	2344918	2344889	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-41-1	NZ_AKHK01000049.1	-	45785	45756	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-14-1	NZ_JHQB01000048.1	-	45371	45342	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-17-1	NZ_JHUB01000024.1	+	37356	37385	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-15-1	NZ_JHUA01000050.1	+	37358	37387	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-62-1	NZ_AKJ01000034.1	-	44971	44942	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-74-1	NZ_AHLU01000006.1	-	45373	45344	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-48-1	NZ_AKGY01000040.1	-	45875	45846	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-39-1	NZ_AKHD01000041.1	-	45762	45733	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-82-1	NZ_AHLG01000074.1	+	37361	37390	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-38-1	NZ_AKHI01000037.1	-	20728	20699	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-81-1	NZ_AHLF01000023.1	+	3788	3817	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-29-1	NZ_AJJR01000021.1	-	45750	45721	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-80-1	NZ_AHLE01000046.1	+	33561	33590	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-16-1	NZ_JHQC01000010.1	-	45434	45405	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-13-1	NZ_JHTZ01000129.1	-	45369	45340	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-72-1	NZ_AHKZ01000035.1	-	45377	45348	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-70-1	NZ_AHKX01000019.1	-	45378	45349	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-69-1	NZ_AFTY01000016.1	-	45374	45345	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-77-1	NZ_AHLA01000084.1	+	37357	37386	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-6-1	NZ_ADEA01000022.1	+	42387	42416	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-76-1	NZ_AFUA01000029.1	-	45373	45344	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-1-1	NC_004461.1	-	1769319	1769290	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-4-1	NZ_GG749263.1	-	45373	45344	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-23-1	NZ_KB373339.1	+	37355	37384	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-2-1	NZ_GG696732.1	+	38912	38941	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-10-1	NZ_KI999596.1	-	46485	46456	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-31-1	NZ_KB821725.1	-	47636	47607	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-11-1	NZ_HG813242.1	-	1766133	1766104	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-5-1	NC_002976.3	-	1764344	1764315	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-63-1	NZ_AKGI01000029.1	-	45860	45831	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-36-1	NZ_AKHF01000108.1	-	45856	45827	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-61-1	NZ_AK GK01000061.1	+	37967	37996	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-8-3	NZ_JTAY01000002.1	-	2023535	2023506	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-22-1	NZ_AMCS01000045.1	-	10592	10563	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-2	NZ_LFKQ01000006.1	-	87471	87442	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-3	NZ_LFKR01000016.1	-	44376	44347	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-4	NZ_JWCO01000048.1	-	44146	44117	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-5	NZ_JVOX01000029.1	+	15211	15240	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-6	NZ_JVEB01000043.1	+	25236	25265	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-7	NZ_JVHC01000034.1	+	17068	17097	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-8	NZ_JVHB01000032.1	+	17072	17101	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-9	NZ_JVED01000048.1	-	45867	45838	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sho-3-10	NZ_JUWW01000005.1	-	44144	44115	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-11	NZ_JUYH01000010.1	-	44135	44106	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-12	NZ_JVQD01000023.1	+	17103	17132	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-13	NZ_JUQI01000082.1	+	6927	6956	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-14	NZ_JUSP01000026.1	+	17103	17132	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssp-7-1	NZ_KK013383.1	+	44200	44171	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-5-1	NZ_AKGC01000005.1	+	15228	15257	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-15	NZ_JVLC01000025.1	-	44260	44231	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-16	NZ_JVVJ01000020.1	+	35612	35641	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-3-17	NZ_JUSR01000027.1	+	35703	35732	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sho-4-1	NZ_AHLD01000027.1	-	44211	44182	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sar-1-1	NZ_ALWK01000038.1	-	15430	15401	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssp-13-1	NZ_AVOQ01000005.1	-	15464	15435	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-990	SRS013261_Baylor_scaffold_8914	-	2516	2487	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-991	SRS017849_Baylor_scaffold_7958	+	46	75	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-992	SRS019016_C462472	-	361	332	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-993	SRS019986_C240789	-	293	264	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-994	SRS020261_C1261455	+	44	73	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-995	SRS024596_C1351232	+	18	47	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-996	SRS044474_C210137	-	285	256	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-59-1	NZ_AKGN01000019.1	-	46028	45999	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-84-1	NZ_AHLI01000052.1	-	45571	45542	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-51-1	NZ_AKGU01000068.1	-	46036	46007	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-47-1	NZ_AKZ01000025.1	-	45840	45811	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-85-1	NZ_AHLJ01000016.1	+	37388	37417	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-53-1	NZ_AKGT01000051.1	-	45819	45790	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-19-1	NZ_AGUC01000054.1	-	26493	26464	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-7-1	NZ_GG696805.1	-	45383	45354	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-57-1	NZ_AKGP01000102.1	-	46107	46078	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sep-58-1	NZ_AKGO01000080.1	-	46140	46111	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-997	SRS058213_C232285	-	939	910	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sco-2-2	NZ_LATV01000002.1	+	49828	49857	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sco-2-3	NZ_LATU01000008.1	+	50130	50159	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Swa-2-3	NZ_LAKH01000008.1	+	42884	42913	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Swa-2-4	NZ_JUWX01000004.1	-	44955	44926	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Swa-7-1	NZ_AFEC010000100.1	-	45052	45023	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Swa-6-1	NC_020164.1	+	811839	811868	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Spn-1-8	NZ_CRBR01000009.1	-	45357	45328	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Swa-5-1	NZ_CANQ01000031.1	-	44983	44954	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Swa-4-1	NZ_JOPV01000022.1	+	43084	43113	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Swa-3-1	NZ_JOPU01000025.1	+	43225	43254	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Swa-2-5	NZ_JPOW01000004.1	+	45929	45958	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Spa-2-1	NC_022737.1	-	619055	619026	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Swa-2-6	NZ_JUVB01000015.1	-	26153	26124	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Spa-1-2	NZ_LAKF01000005.1	+	42862	42891	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssp-12-1	NZ_ANBY01000017.1	-	33706	33677	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssp-9-1	NZ_JHVS01000011.1	+	42798	42827	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssu-1-1	NZ_LCSH01000018.1	-	44953	44924	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mab-1-1	NZ_CSZP01001570.1	-	287	258	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Swa-1-1	NZ_ACPZ01000047.1	-	44428	44399	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssa-2-1	NZ_JUTO01000006.1	+	44286	44315	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sga-1-1	NZ_JXCF01000018.1	+	48546	48575	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sps-2-1	NC_014925.1	-	1856805	1856776	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sps-1-1	NC_017568.1	+	768136	768165	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sps-3-1	NZ_ANOI01000001.1	+	901751	901780	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sin-2-1	NZ_CAIB01000243.1	+	11672	11701	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sde-1-1	NZ_CAIA01000073.1	+	28519	28548	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mca-1-1	NC_011999.1	-	1910962	1910933	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sch-1-1	NZ_JMJF01000010.1	+	39072	39101	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-1	NZ_JQHA01000012.1	-	44057	44028	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-2	NZ_CUGE01000009.1	-	19556	19527	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-3	NZ_CUHF01000018.1	-	17451	17422	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-4	NZ_JQHB01000033.1	-	44057	44028	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssc-1-1	NZ_CP010309.1	+	858128	858157	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssc-1-2	NZ_CP009762.1	+	793853	793882	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssc-1-3	NZ_CP009676.1	+	818914	818943	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssc-1-4	NZ_CP009470.1	+	790202	790231	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssp-14-1	NZ_KE150418.1	+	949481	949510	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-5	NZ_LAKG01000019.1	-	24111	24082	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-6	NZ_CUEY01000017.1	+	28755	28784	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-7	NZ_CUEJ01000017.1	+	28692	28721	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-8	NZ_CUEF01000018.1	+	15555	15584	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-9	NZ_CUHK01000019.1	+	28699	28728	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-10	NZ_CUES01000010.1	-	44033	44004	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-11	NZ_CUEH01000020.1	+	28721	28750	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-12	NZ_CUHH01000016.1	+	28696	28725	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-13	NZ_CUGA01000012.1	+	33827	33856	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-14	NZ_CUEZ01000009.1	-	43979	43950	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-15	NZ_CUCM01000013.1	-	23830	23801	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-16	NZ_CUGK01000016.1	-	23911	23882	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-17	NZ_CUFM01000019.1	+	28709	28738	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-18	NZ_CUFQ01000015.1	+	28720	28749	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-19	NZ_CUFJ01000015.1	+	28722	28751	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-20	NZ_CUHB01000013.1	-	23912	23883	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-21	NZ_CUGI01000021.1	+	15611	15640	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-22	NZ_CUFR01000016.1	+	28709	28738	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-23	NZ_CUDZ01000003.1	-	23912	23883	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-24	NZ_CUGW01000017.1	+	28731	28760	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-25	NZ_CUGZ01000014.1	-	23911	23882	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-26	NZ_CUDY01000028.1	-	23835	23806	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-27	NZ_CUGN01000014.1	+	15549	15578	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-28	NZ_CUDQ01000009.1	+	28732	28761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-29	NZ_CUEI01000018.1	+	15557	15586	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-30	NZ_CUEQ01000020.1	+	15546	15575	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-31	NZ_CUFS01000017.1	+	28821	28850	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-32	NZ_CUFE01000014.1	-	23893	23864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-33	NZ_CUEX01000014.1	-	23899	23870	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-34	NZ_CUFY01000018.1	+	28706	28735	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-35	NZ_CUGP01000016.1	+	28690	28719	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-36	NZ_CUFX01000017.1	+	28755	28784	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-37	NZ_CUFL01000026.1	+	15613	15642	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-38	NZ_CUDS01000018.1	+	28713	28742	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-39	NZ_CUDX01000015.1	-	18076	18047	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-40	NZ_CUDU01000005.1	-	23912	23883	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sha-4-41	NZ_CUHQ01000018.1	+	28694	28723	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-42	NZ_CUCK01000012.1	+	28720	28749	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-43	NZ_CUGA01000014.1	+	28691	28720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-44	NZ_CUGC01000018.1	+	15618	15647	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-45	NZ_CUDI01000019.1	+	28702	28731	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-46	NZ_CUER01000015.1	-	23834	23805	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-47	NZ_CUDO01000015.1	-	23830	23801	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-48	NZ_CUDW01000027.1	-	23825	23796	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-49	NZ_CUCL01000019.1	+	30377	30406	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-50	NZ_CUEV01000014.1	+	28711	28740	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-51	NZ_CUFD01000015.1	+	28739	28768	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-52	NZ_CUGQ01000018.1	+	28691	28720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-53	NZ_CUDF01000019.1	+	28709	28738	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-119	NZ_CUED01000013.1	-	23912	23883	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-54	NZ_CUGU01000016.1	+	28755	28784	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-55	NZ_CUDC01000014.1	-	33897	33868	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-56	NZ_CUGT01000014.1	-	23922	23893	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-57	NZ_CUFN01000017.1	-	23836	23807	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-58	NZ_CUDG01000021.1	+	21475	21504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-59	NZ_CUEK01000015.1	-	23830	23801	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-60	NZ_CUCS01000032.1	-	23842	23813	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-61	NZ_CUCI01000016.1	-	23842	23813	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-62	NZ_CUCR01000015.1	+	28672	28701	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-63	NZ_CUFW01000024.1	-	23791	23762	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-64	NZ_CUGD01000018.1	+	28719	28748	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-65	NZ_CUEL01000014.1	-	23842	23813	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-66	NZ_CUHI01000017.1	+	22937	22966	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-67	NZ_CUEN01000018.1	+	28728	28757	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-68	NZ_CUDM01000018.1	+	28755	28784	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-69	NZ_CUDV01000012.1	-	23830	23801	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-70	NZ_CUGR01000015.1	-	23922	23893	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-71	NZ_CUFI01000017.1	+	26650	26679	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-72	NZ_CUHE01000019.1	+	21344	21373	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-73	NZ_CUGY01000021.1	+	15570	15599	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-74	NZ_CUGO01000018.1	-	24793	24764	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-75	NZ_CUCY01000018.1	-	23911	23882	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-76	NZ_CUHC01000010.1	-	23911	23882	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-77	NZ_CUFH01000015.1	-	23912	23883	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-78	NZ_CUFA01000016.1	+	28691	28720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-79	NZ_CUCP01000012.1	-	23830	23801	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-80	NZ_CUEB01000022.1	+	15564	15593	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-81	NZ_CUDV01000014.1	-	44049	44020	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-82	NZ_CUHG01000015.1	+	23286	23315	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-83	NZ_CUCW01000018.1	+	28694	28723	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-84	NZ_CUFT01000020.1	+	20131	20160	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-85	NZ_CUFG01000017.1	+	22976	23005	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-86	NZ_CUCO01000013.1	-	23842	23813	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-87	NZ_CUCU01000018.1	-	23911	23882	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-88	NZ_CUFK01000001.1	+	248538	248567	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-89	NZ_CUEW01000014.1	-	23922	23893	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-90	NZ_CUEC01000012.1	+	11448	11477	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-91	NZ_CUCN01000006.1	+	59873	59902	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sha-4-92	NZ_CUGF01000017.1	+	28713	28742	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-93	NZ_CUEA01000021.1	+	5363	5392	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-94	NZ_CUCQ01000013.1	-	23830	23801	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-95	NZ_CUET01000018.1	+	28738	28767	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-96	NZ_CUFU01000016.1	+	28711	28740	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-97	NZ_CUFV01000018.1	+	28699	28728	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-98	NZ_CUDR01000018.1	+	28709	28738	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-99	NZ_CUHL01000016.1	+	28755	28784	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-100	NZ_CUHD01000018.1	+	28731	28760	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-101	NZ_CUFF01000017.1	+	28705	28734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-102	NZ_CUEU01000016.1	-	23911	23882	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-103	NZ_CUHM01000013.1	+	28722	28751	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-104	NZ_CUWC01000015.1	+	28730	28759	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-105	NZ_CUFB01000016.1	-	24282	24253	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-106	NZ_CUDT01000017.1	+	28729	28758	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-107	NZ_CUEO01000007.1	-	43987	43958	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-108	NZ_CUDN01000016.1	-	23911	23882	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-109	NZ_CVRV01000016.1	+	28691	28720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-110	NZ_JVTM01000047.1	+	28698	28727	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-111	NZ_JVVE01000004.1	-	23752	23723	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-112	NZ_JVRQ01000084.1	+	15522	15551	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-113	NZ_JVMX01000090.1	+	28692	28721	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-114	NZ_JVPA01000099.1	-	23890	23861	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-1-1	NC_007168.1	+	923690	923719	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-6-1	NZ_AJVA01000015.1	-	23726	23697	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4078-1	NZ_JHTU01000062.1	+	15552	15581	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-115	NZ_JPRW01000011.1	-	23862	23833	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-116	NZ_JFOJ01000025.1	-	23956	23927	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-117	NZ_CUFO01000010.1	-	43975	43946	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-5-1	NZ_JRKN01000025.1	+	36628	36657	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sha-4-118	NZ_CUEE01000012.1	+	20689	20718	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Spe-1-1	NZ_JVAY01000023.1	+	42057	42086	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Spe-2-1	NZ_AGUA01000050.1	-	22376	22347	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssi-2-1	NZ_AEUN01000494.1	+	1616	1645	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssp-10-1	NZ_JTLN01000023.1	-	19694	19665	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssa-2-2	NZ_JXBG01000018.1	-	45141	45112	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Mab-1-2	NZ_CSZG01001468.1	-	266	237	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssa-2-3	NZ_JUUE01000025.1	+	26596	26625	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssa-1-1	NC_007350.1	+	796466	796495	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssa-3-1	NZ_AHKB01000013.1	+	47770	47799	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Shy-1-1	NZ_CP008747.1	+	799781	799810	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sag-1-1	NZ_JPRT01000013.1	+	14025	14054	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssi-3-1	NZ_KB373330.1	-	50416	50387	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ssi-4-1	NZ_AXDY01000013.1	-	48926	48897	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-998	Anterior_nares_Baylor_scaffold_40137	+	669	698	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-999	SRS011105_WUGC_scaffold_1835	+	18318	18347	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1000	SRS024424_C251219	-	635	606	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4004-1	NZ_AGRN01000012.1	-	54847	54818	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4084-1	NZ_AICH01000086.1	-	47226	47197	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4117-1	NZ_AHBQ01000042.1	-	25505	25476	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4095-1	NZ_AHZL01000017.1	+	18318	18347	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3020-1	NZ_JBMO01000011.1	-	56759	56730	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-808-1	NZ_JEUZ01000006.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-306-1	NZ_AZMZ01000011.1	+	54437	54466	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1117-1	NZ_AVPR01000004.1	-	48328	48299	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2628-1	NZ_JANQ01000006.1	-	31901	31872	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1164-1	NZ_JANM01000001.1	-	103797	103768	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2630-1	NZ_LBIJ01000052.1	-	15717	15688	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3721-1	NZ_LAKI01000016.1	+	20378	20407	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1163-1	NZ_JANO01000008.1	+	54412	54441	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4074-1	NZ_AJKD01000046.1	-	54814	54785	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-59-2	NZ_CTYB01000015.1	-	25255	25226	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2631-1	NZ_LBII01000034.1	-	54843	54814	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2629-1	NZ_LBIF01000025.1	-	54839	54810	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3759-1	NZ_AOFU01000007.1	-	54626	54597	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3984-1	NZ_BAFI01000013.1	-	34888	34859	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-14-1	NZ_ACKI01000009.1	+	51796	51825	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3768-1	NZ_AIVJ01000015.1	-	56838	56809	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-6-1	NZ_ACKD01000061.1	+	18428	18457	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3779-1	NZ_AOCQ01000048.1	+	53422	53451	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3985-1	NZ_AEUQ01000018.1	+	18711	18740	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3758-1	NZ_BABZ01000029.1	+	54326	54355	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-12-1	NZ_ADJK01000010.1	-	35339	35310	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4-1	NZ_ACSS01000022.1	-	25134	25105	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-19-1	NZ_ACKL01000025.1	-	34879	34850	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-20-1	NZ_ABF01000013.1	+	18336	18365	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-9-1	NZ_ACKG01000001.1	+	18295	18324	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3780-1	NZ_AOFV01000008.1	+	53462	53491	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-16-1	NZ_ADJI01000011.1	-	25055	25026	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3778-1	NZ_AOCP01000035.1	-	54850	54821	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-17-1	NZ_ACKK01000004.1	-	34778	34749	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-8-1	NZ_ACKF01000025.1	+	18300	18329	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-5-1	NZ_ACKC01000004.1	-	34879	34850	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3781-1	NZ_AOFW01000023.1	-	55027	54998	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-10-1	NZ_ACYO01000010.1	-	25192	25163	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-11-1	NZ_ADJJ01000011.1	-	25197	25168	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-18-1	NZ_ACSN01000014.1	-	54849	54820	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3766-1	NZ_ANCJ01000020.1	-	54772	54743	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-15-1	NZ_ACKJ01000053.1	-	34879	34850	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-13-1	NZ_ACKH01000023.1	+	18294	18323	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-7-1	NZ_ACKE01000044.1	+	18294	18323	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3983-1	NZ_AMTC01000034.1	-	15812	15783	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4108-1	NZ_AHBK01000071.1	-	35128	35099	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4057-1	NZ_AHKE01000014.1	-	59009	58980	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4109-1	NZ_AHBT01000029.1	-	25283	25254	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-77-1	NZ_ABSA01000077.1	-	54759	54730	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4107-1	NZ_ALWG01000007.1	-	54626	54597	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4070-1	NZ_AHVT01000022.1	-	59124	59095	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4066-1	NZ_AHVV01000011.1	-	20421	20392	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4100-1	NZ_AFGU010000104.1	+	55716	55745	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4069-1	NZ_AHVO01000012.1	-	58156	58127	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-61-1	NZ_BABM01000001.1	-	2248261	2248232	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4110-1	NZ_AHBU01000033.1	-	35144	35115	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4116-1	NZ_AHBP01000045.1	-	35049	35020	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-4080-1	NZ_AJLX01000024.1	-	54759	54730	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4112-1	NZ_AHBL01000051.1	-	35238	35209	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3744-1	NZ_ANHW01000011.1	+	18294	18323	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4064-1	NZ_AIES01000019.1	-	57510	57481	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4068-1	NZ_AHVL01000023.1	-	58578	58549	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4065-1	NZ_AHVQ01000012.1	-	57736	57707	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4079-1	NZ_AIDT01000006.1	-	56349	56320	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4060-1	NZ_AHVG01000019.1	-	59351	59322	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4087-1	NZ_AHLL01000033.1	-	35267	35238	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4111-1	NZ_AHBV01000033.1	-	35172	35143	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4062-1	NZ_AIEQ01000010.1	-	58114	58085	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4059-1	NZ_AHVX01000043.1	-	60169	60140	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4071-1	NZ_AHVD01000025.1	-	48130	48101	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4121-1	NZ_AKYW01000010.1	+	28884	28913	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4115-1	NZ_AHBO01000053.1	-	25113	25084	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4083-1	NZ_AHLT01000090.1	+	53400	53429	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-54-1	NZ_ACZQ01000016.1	+	18318	18347	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4088-1	NZ_AHLO01000010.1	-	41581	41552	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3746-1	NZ_ANIB01000005.1	+	55076	55105	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4067-1	NZ_AHVR01000009.1	-	58247	58218	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3743-2	NZ_AMYL01000009.1	-	20386	20357	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4098-1	NZ_BAEA01000005.1	-	54851	54822	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4119-1	NZ_AHBS01000048.1	-	35093	35064	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4114-1	NZ_AHBN01000052.1	-	25427	25398	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4113-1	NZ_AHBM01000041.1	-	25182	25153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4118-1	NZ_AHBR01000039.1	-	35181	35152	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4009-1	NZ_ANAL01000031.1	-	18161	18132	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3995-1	NZ_AOFX01000036.1	-	20485	20456	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4028-1	NZ_AGTV01000033.1	+	42513	42542	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4014-1	NZ_AGTY01000039.1	-	54848	54819	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4051-1	NZ_AHVV01000014.1	-	15829	15800	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4042-1	NZ_ABWY01000017.1	-	34879	34850	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3999-1	NZ_AHZK01000003.1	+	18314	18343	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4036-1	NZ_ALWH01000007.1	-	54626	54597	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4054-1	NZ_AHVP01000029.1	-	55599	55570	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4019-1	NZ_AHJW01000027.1	-	55010	54981	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4048-1	NZ_AHVJ01000017.1	-	20743	20714	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4047-1	NZ_AHVE01000012.1	-	36420	36391	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4031-1	NZ_AGTX01000020.1	-	54805	54776	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4000-1	NZ_AJGE01000006.1	+	18324	18353	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4030-1	NZ_AGTW01000035.1	-	54768	54739	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3997-1	NZ_AHZH01000007.1	-	22857	22828	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4055-1	NZ_AIEP01000019.1	-	22405	22376	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4008-1	NZ_AFTM01000022.1	-	28890	28861	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4027-1	NZ_AFPN01000048.1	-	54627	54598	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4001-1	NZ_ALWE01000045.1	-	54609	54580	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4032-1	NZ_AHKU01000089.1	-	20842	20813	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4043-1	NZ_AHVK01000015.1	-	56807	56778	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3996-1	NZ_ARXY01000030.1	-	54931	54902	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4049-1	NZ_AHVF01000014.1	-	56620	56591	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4003-1	NZ_AFEF01000009.1	-	34890	34861	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4039-1	NZ_ASHS01000035.1	-	34898	34869	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-4002-1	NZ_AHZJ01000009.1	+	18316	18345	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4010-1	NZ_AFTN01000024.1	-	54601	54572	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4016-1	NZ_ANAK01000023.1	-	25281	25252	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3987-1	NZ_BAFA01000003.1	+	54805	54834	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4035-1	NZ_ALWF01000054.1	-	54609	54580	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3998-1	NZ_AHZI01000003.1	-	54609	54580	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4053-1	NZ_AHVS01000012.1	-	29787	29758	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3994-1	NZ_ASTH01000013.1	+	53397	53426	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4023-1	NZ_AHJY01000021.1	+	53399	53428	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4056-1	NZ_AHVI01000012.1	-	58959	58930	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4041-1	NZ_ABWT01000015.1	+	18336	18365	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4017-1	NZ_AHJV01000045.1	-	54800	54771	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3986-1	NZ_AEUR01000019.1	-	55149	55120	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4029-1	NZ_AHKA01000008.1	-	54672	54643	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4025-1	NZ_AHJZ01000033.1	-	15521	15492	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4033-1	NZ_AHKV01000021.1	+	18430	18459	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4034-1	NZ_AHKW01000042.1	+	28774	28803	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4050-1	NZ_AHVM01000014.1	-	59158	59129	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4046-1	NZ_AHVN01000038.1	-	35168	35139	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4005-1	NZ_AFEE01000059.1	-	55023	54994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-23-1	NZ_ACOT01000040.1	-	54845	54816	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4012-1	NZ_AGRO01000055.1	-	15808	15779	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4020-1	NZ_AHJX01000009.1	-	20656	20627	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4044-1	NZ_AIER01000007.1	-	61496	61467	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2704-1	NZ_CBWW010000060.1	+	7143	7172	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-500-1	NZ_JFOW01000018.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-505-1	NZ_JFPB01000020.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-510-1	NZ_JFPG01000019.1	-	35659	35630	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-537-1	NZ_JFQF01000015.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-538-1	NZ_JFQG01000016.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-409-1	NZ_JFRP01000016.1	-	36265	36236	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-501-1	NZ_JFOX01000017.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-506-1	NZ_JFPC01000017.1	-	35086	35057	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-507-1	NZ_JFPD01000019.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-511-1	NZ_JFPH01000018.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-512-1	NZ_JFPI01000018.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-534-1	NZ_JFQC01000018.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-539-1	NZ_JFQH01000018.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-413-1	NZ_JFRL01000015.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-412-1	NZ_JFRM01000016.1	-	35284	35255	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-408-1	NZ_JFRQ01000020.1	-	25129	25100	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-457-1	NZ_JGNN01000006.1	-	56762	56733	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-499-1	NZ_JFOV01000016.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-504-1	NZ_JFPA01000017.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-509-1	NZ_JFPF01000019.1	-	35659	35630	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-536-1	NZ_JFQE01000017.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-410-1	NZ_JFRO01000016.1	-	36390	36361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-497-1	NZ_JFOT01000022.1	-	25361	25332	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-498-1	NZ_JFOU01000016.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-502-1	NZ_JFOY01000020.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-503-1	NZ_JFOZ01000016.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-508-1	NZ_JFPE01000019.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-535-1	NZ_JFQD01000018.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-540-1	NZ_JFQI01000018.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-411-1	NZ_JFRN01000019.1	-	36149	36120	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-488-1	NZ_JGNO01000001.1	-	1681337	1681308	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-529-1	NZ_JFPX01000018.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-527-1	NZ_JFPV01000016.1	-	36492	36463	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-528-1	NZ_JFPW01000019.1	-	34974	34945	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-532-1	NZ_JFQA01000016.1	-	35261	35232	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-533-1	NZ_JFQB01000018.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-515-1	NZ_JFPL01000018.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-521-1	NZ_JFPQ01000016.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-523-1	NZ_JFPR01000018.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-516-1	NZ_JFPM01000019.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-517-1	NZ_JFPN01000018.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-524-1	NZ_JFPS01000015.1	-	35659	35630	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-526-1	NZ_JFPU01000020.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-531-1	NZ_JFPZ01000015.1	-	36392	36363	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-514-1	NZ_JFPK01000019.1	-	35659	35630	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-520-1	NZ_JFPP01000018.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-525-1	NZ_JFPT01000019.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-530-1	NZ_JFPY01000018.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-513-1	NZ_JFPJ01000016.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-519-1	NZ_JFPO01000018.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1746-1	NZ_JBBD01000006.1	-	49963	49934	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1817-1	NZ_JDCJ01000001.1	-	49963	49934	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1847-1	NZ_JDCO01000002.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1865-1	NZ_JDCT01000008.1	-	91437	91408	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1908-1	NZ_JDCY01000012.1	-	55496	55467	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1949-1	NZ_JDDD01000016.1	-	21401	21372	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1829-1	NZ_JDCK01000012.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1850-1	NZ_JDCP01000011.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1879-1	NZ_JDCU01000001.1	-	49963	49934	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1915-1	NZ_JDCZ01000010.1	-	35154	35125	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1950-1	NZ_JDDE01000006.1	-	133588	133559	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1952-1	NZ_JDDF01000002.1	-	238695	238666	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1758-1	NZ_JDDZ01000011.1	-	36491	36462	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1735-1	NZ_JBBN01000017.1	-	35603	35574	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1830-1	NZ_JDCL01000012.1	-	35918	35889	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1836-1	NZ_JDCM01000007.1	-	62156	62127	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1852-1	NZ_JDCQ01000009.1	-	62354	62325	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1859-1	NZ_JDCR01000003.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1895-1	NZ_JDCW01000003.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1922-1	NZ_JDDA01000006.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1939-1	NZ_JDDB01000001.1	-	238862	238833	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1767-1	NZ_JDEA01000006.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1798-1	NZ_JDFE01000010.1	-	61261	61232	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1681-1	NZ_JBAY01000005.1	-	57586	57557	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1732-1	NZ_JBBP01000013.1	-	61797	61768	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1748-1	NZ_JDCI01000012.1	-	35617	35588	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1838-1	NZ_JDCN01000012.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1863-1	NZ_JDCS01000002.1	-	238606	238577	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1897-1	NZ_JDCX01000012.1	-	35605	35576	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-1940-1	NZ_JDDC01000013.1	-	35656	35627	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1684-1	NZ_JBDH01000007.1	-	111776	111747	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1680-1	NZ_JBDK01000007.1	-	109916	109887	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1715-1	NZ_JBCF01000011.1	-	36100	36071	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1666-1	NZ_JBDX01000010.1	-	58580	58551	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1977-1	NZ_JDDK01000001.1	-	58248	58219	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1720-1	NZ_JBCA01000017.1	-	3620	3591	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1664-1	NZ_JBDZ01000012.1	-	19785	19756	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1972-1	NZ_JDDI01000010.1	-	21997	21968	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1992-1	NZ_JDDN01000007.1	-	62153	62124	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1730-1	NZ_JBBR01000006.1	-	112235	112206	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1653-1	NZ_JBEJ01000011.1	-	32842	32813	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1966-1	NZ_JDDH01000008.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1988-1	NZ_JDDM01000012.1	-	36292	36263	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1707-1	NZ_JBCM01000016.1	-	35136	35107	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1705-1	NZ_JBCO01000009.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1671-1	NZ_JBDT01000006.1	-	112159	112130	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1675-1	NZ_JBDP01000014.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1959-1	NZ_JDDG01000010.1	-	34416	34387	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1982-1	NZ_JDDL01000012.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1142-1	NZ_JBFF01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1149-1	NZ_JBRF01000002.1	-	49802	49773	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1151-1	NZ_JBNB01000002.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1007-1	NZ_JDZL01000002.1	-	54924	54895	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-996-1	NZ_JDGS01000003.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1051-1	NZ_JFSI01000003.1	-	54887	54858	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1012-1	NZ_JGFD01000019.1	-	34972	34943	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-979-1	NZ_JGIB01000018.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1116-1	NZ_AVPA01000008.1	+	55340	55369	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-952-1	NZ_JDGS01000010.1	-	56694	56665	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1044-1	NZ_JFSJ01000001.1	-	56794	56765	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-951-1	NZ_JEUI01000002.1	-	56994	56965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1013-1	NZ_JGFE01000018.1	-	35013	34984	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2351-1	NZ_JDEI01000006.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2256-1	NZ_JDEN01000007.1	-	49944	49915	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2278-1	NZ_JDEE01000003.1	-	215968	215939	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2356-1	NZ_JDEJ01000004.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2259-1	NZ_JDEO01000013.1	-	35331	35302	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2166-1	NZ_JEFF01000010.1	-	55960	55931	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2120-1	NZ_JEFK01000013.1	-	35321	35292	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2217-1	NZ_JEFC01000001.1	-	217173	217144	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2160-1	NZ_JEFG01000011.1	-	72453	72424	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2156-1	NZ_JEFH01000015.1	-	35809	35780	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2117-1	NZ_JEFL01000001.1	-	56498	56469	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2230-1	NZ_JEFB01000013.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2281-1	NZ_JDEF01000001.1	-	238570	238541	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2237-1	NZ_JDEK01000015.1	-	35331	35302	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2263-1	NZ_JDEB01000008.1	-	61334	61305	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2295-1	NZ_JDEG01000006.1	-	112279	112250	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2307-1	NZ_JDEH01000002.1	-	236160	236131	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2240-1	NZ_JDEL01000012.1	-	15617	15588	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2255-1	NZ_JDEM01000010.1	-	15617	15588	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2183-1	NZ_JEFE01000002.1	-	109185	109156	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2125-1	NZ_JEFJ01000009.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2206-1	NZ_JEFD01000004.1	-	217229	217200	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2135-1	NZ_JEFI01000012.1	-	35661	35632	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2026-1	NZ_JDDU01000006.1	-	58331	58302	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2008-1	NZ_JDDS01000012.1	-	17025	16996	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2010-1	NZ_JDDT01000010.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2065-1	NZ_JEFV01000001.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2034-1	NZ_JEFZ01000009.1	-	111533	111504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2033-1	NZ_JEGA01000001.1	-	117350	117321	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2006-1	NZ_JDDR01000012.1	-	35129	35100	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2029-1	NZ_JDDW01000011.1	-	43765	43736	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2048-1	NZ_JEFW01000009.1	-	115262	115233	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-995-1	NZ_JGHN01000005.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1027-1	NZ_JGIC01000015.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1090-1	NZ_JGID01000011.1	-	34971	34942	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1137-1	NZ_JBEM01000001.1	-	228947	228918	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1110-1	NZ_JBMR01000004.1	-	56790	56761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1143-1	NZ_JBFE01000003.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1093-1	NZ_JDGA01000018.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1010-1	NZ_JDZK01000005.1	-	56892	56863	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1076-1	NZ_JFSG01000002.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1058-1	NZ_JFSH01000001.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-938-1	NZ_JFSL01000006.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-942-1	NZ_JEUF01000007.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1047-1	NZ_JEVJ01000006.1	-	56789	56760	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1049-1	NZ_JEVK01000016.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1077-1	NZ_JFSF01000001.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1026-1	NZ_JFSK01000009.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1025-1	NZ_JEVI01000008.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1015-1	NZ_JGFF01000005.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1120-1	NZ_AZTI01000010.1	+	7310	7339	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1105-1	NZ_JBPF01000002.1	-	238686	238657	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1118-1	NZ_AZTF01000013.1	-	54734	54705	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1082-1	NZ_JDYS01000002.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1068-1	NZ_JDYT01000002.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1115-1	NZ_JBKG01000002.1	-	56926	56897	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1119-1	NZ_AZTH01000013.1	+	18429	18458	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1104-1	NZ_JBPX01000004.1	-	238686	238657	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1121-1	NZ_AZTG01000009.1	-	54919	54890	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-961-1	NZ_JEUQ01000005.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-963-1	NZ_JEUR01000001.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-980-1	NZ_JEUV01000003.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-983-1	NZ_JEUW01000011.1	-	34849	34820	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-978-1	NZ_JGGS01000006.1	-	55136	55107	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1069-1	NZ_JGGT01000012.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1066-1	NZ_JDYV01000004.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-969-1	NZ_JGGR01000001.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1067-1	NZ_JDYU01000002.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-972-1	NZ_JEUT01000006.1	-	25226	25197	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-289-1	NZ_JBLW01000002.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-287-1	NZ_JBNU01000003.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-282-1	NZ_JBMG01000007.1	-	56893	56864	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-237-1	NZ_JBOA01000007.1	-	188315	188286	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-310-1	NZ_JFOR01000024.1	-	25129	25100	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-249-1	NZ_JDXI01000001.1	-	1674371	1674342	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-256-1	NZ_JIZR01000010.1	-	56310	56281	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-147-1	NZ_JOQA01000063.1	-	55594	55565	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-101-1	NZ_JOPR01000046.1	-	55273	55244	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-148-1	NZ_JOPT01000040.1	-	56454	56425	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-385-1	NZ_JFOS01000021.1	-	36291	36262	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-252-1	NZ_JIZV01000007.1	-	52502	52473	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-81-1	NZ_JJEY01000022.1	-	20463	20434	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-100-1	NZ_JOPY01000062.1	-	55189	55160	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-102-1	NZ_JOPZ01000029.1	-	55106	55077	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-285-1	NZ_JBQY01000001.1	-	120363	120334	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-244-1	NZ_JBLJ01000007.1	-	61838	61809	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-303-1	NZ_AZMY01000008.1	-	54950	54921	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-301-1	NZ_JBFS01000008.1	-	62157	62128	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-298-1	NZ_JBHF01000004.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-284-1	NZ_JBRA01000002.1	-	56893	56864	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-320-1	NZ_JFOQ01000016.1	-	15539	15510	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-381-1	NZ_JGNP01000003.1	-	462809	462780	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-268-1	NZ_JIZF01000012.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-99-1	NZ_JOPQ01000036.1	-	55216	55187	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-338-1	NZ_JFOO01000014.1	-	36224	36195	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-327-1	NZ_JFOP01000014.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-210-1	NZ_JJAH01000015.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-149-1	NZ_JOQB01000066.1	-	55222	55193	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-223-1	NZ_JBQV01000005.1	-	58248	58219	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-224-1	NZ_JBQD01000005.1	-	56994	56965	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-93-1	NZ_JJEM01000015.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-95-1	NZ_JJEK01000015.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-82-1	NZ_JJEX01000015.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-192-1	NZ_JJAZ01000013.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-138-1	NZ_JJCZ01000013.1	-	54858	54829	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-304-1	NZ_AZMX01000004.1	-	54950	54921	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-183-1	NZ_JJB01000015.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-128-1	NZ_JJDH01000013.1	-	54814	54785	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-96-1	NZ_JJEJ01000010.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-204-1	NZ_JJAN01000014.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-195-1	NZ_JJAW01000011.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-143-1	NZ_JJCS01000014.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-97-1	NZ_JJEO01000012.1	-	25790	25761	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-86-1	NZ_JJET01000013.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-83-1	NZ_JJEW01000012.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-168-1	NZ_JJBX01000016.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-167-1	NZ_JJBY01000016.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-115-1	NZ_JJDU01000014.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3592-1	NZ_JJEU01000005.1	-	56549	56520	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3598-1	NZ_JEUL01000008.1	-	56993	56964	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3623-1	NZ_JGCG01000005.1	-	34873	34844	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3639-1	NZ_JGGD01000007.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3636-1	NZ_JGHW01000008.1	-	55000	54971	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→

Sau-3565-1	NZ_JIGG01000013.1	-	35013	34984	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3473-1	NZ_JIFS01000014.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3457-1	NZ_JIGI01000014.1	-	25997	25968	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3455-1	NZ_JIGK01000015.1	-	25968	25939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3419-1	NZ_JIHU01000011.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3414-1	NZ_JIHZ01000011.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3621-1	NZ_JDZC01000002.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3600-1	NZ_JDZD01000004.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3564-1	NZ_JFRU01000011.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3615-1	NZ_JEVR01000008.1	-	55017	54988	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3529-1	NZ_JGFO01000005.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3563-1	NZ_JGFP01000010.1	-	27857	27828	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3637-1	NZ_JGHX01000008.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3471-1	NZ_JIFU01000012.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3446-1	NZ_JIGT01000015.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3400-1	NZ_JIIN01000014.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3479-1	NZ_JDGG01000002.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3483-1	NZ_JFRW01000003.1	-	54900	54871	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3590-1	NZ_JEUK01000012.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3480-1	NZ_JGFM01000002.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3622-1	NZ_JGGB01000014.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3634-1	NZ_JGHV01000012.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3517-1	NZ_JGIF01000026.1	-	18838	18809	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3485-1	NZ_JGMY01000009.1	-	56790	56761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3463-1	NZ_JIGC01000014.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3433-1	NZ_JIHG01000011.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3528-1	NZ_JDFZ01000009.1	-	56694	56665	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3501-1	NZ_JFRV01000012.1	-	34962	34933	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3633-1	NZ_JEVS01000016.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3512-1	NZ_JGHT01000010.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3550-1	NZ_JGHU01000010.1	-	56790	56761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3466-1	NZ_JIFZ01000014.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3441-1	NZ_JIGY01000015.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3553-1	NZ_JGHD01000011.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3541-1	NZ_JGHC01000005.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3523-1	NZ_JDYM01000011.1	-	56793	56764	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3498-1	NZ_JGHB01000006.1	-	55218	55189	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3580-1	NZ_JGHF01000009.1	-	55116	55087	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3547-1	NZ_JDYL01000002.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3603-1	NZ_JEUP01000007.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3611-1	NZ_JEJU01000002.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3394-1	NZ_JIIT01000011.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3392-1	NZ_JIIV01000015.1	-	54582	54553	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3555-1	NZ_JGHE01000006.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3395-1	NZ_JIIS01000014.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-612-1	NZ_JDGR01000007.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-637-1	NZ_JDZQ01000002.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-632-1	NZ_JDZR01000002.1	-	56993	56964	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-543-1	NZ_JFQL01000019.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-548-1	NZ_JFQQ01000018.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-555-1	NZ_JFQV01000017.1	-	36392	36363	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-561-1	NZ_JFRA01000020.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-568-1	NZ_JFRF01000018.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-574-1	NZ_JFRK01000024.1	-	28808	28779	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-620-1	NZ_JGEY01000017.1	-	34972	34943	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-631-1	NZ_JGFS01000010.1	-	34973	34944	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-665-1	NZ_JGGH01000012.1	-	34971	34942	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-684-1	NZ_JGGI01000011.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-666-1	NZ_JGHH01000012.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-654-1	NZ_JDGN01000011.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-669-1	NZ_JFSO01000007.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-544-1	NZ_JFQM01000014.1	-	36385	36356	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-550-1	NZ_JFQR01000016.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-556-1	NZ_JFQW01000017.1	-	36280	36251	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-563-1	NZ_JFRB01000017.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-569-1	NZ_JFRG01000017.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-623-1	NZ_JGEZ01000001.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-638-1	NZ_JDZP01000004.1	-	235328	235299	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-541-1	NZ_JFQJ01000018.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-542-1	NZ_JFQK01000019.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-546-1	NZ_JFQO01000019.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-547-1	NZ_JFQP01000017.1	-	35397	35368	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-553-1	NZ_JFQT01000018.1	-	35225	35196	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-554-1	NZ_JFQU01000017.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-560-1	NZ_JFQZ01000016.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-566-1	NZ_JFRE01000022.1	-	18347	18318	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-572-1	NZ_JFRJ01000015.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-616-1	NZ_JGEX01000037.1	-	4832	4803	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-657-1	NZ_JGFC01000011.1	-	32964	32935	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-611-1	NZ_JGFR01000013.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-655-1	NZ_JDGO01000005.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-650-1	NZ_JDZO01000001.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-545-1	NZ_JFQN01000020.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-552-1	NZ_JFQS01000032.1	-	15721	15692	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-557-1	NZ_JFQX01000016.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-558-1	NZ_JFQY01000018.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-564-1	NZ_JFRC01000016.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-565-1	NZ_JFRD01000015.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-570-1	NZ_JFRH01000018.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-571-1	NZ_JFRI01000019.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-629-1	NZ_JGFA01000016.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-630-1	NZ_JGFB01000026.1	-	19182	19153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-610-1	NZ_JGFQ01000023.1	-	34972	34943	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-672-1	NZ_JDYY01000005.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-662-1	NZ_JGHG01000005.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2272-1	NZ_JDEC01000003.1	-	24747	24718	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2277-1	NZ_JDED01000012.1	-	55865	55836	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1996-1	NZ_JDDO01000011.1	-	36390	36361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1998-1	NZ_JDDP01000008.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2001-1	NZ_JDDQ01000007.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2028-1	NZ_JDDV01000012.1	-	55495	55466	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2097-1	NZ_JEFP01000012.1	-	14444	14415	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2083-1	NZ_JEFQ01000002.1	-	217273	217244	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2067-1	NZ_JEFU01000008.1	-	113736	113707	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2204-1	NZ_JDYR01000002.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2109-1	NZ_JEFM01000011.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2079-1	NZ_JEFR01000002.1	-	139075	139046	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2038-1	NZ_JEFY01000008.1	-	61496	61467	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2098-1	NZ_JEFO01000010.1	-	43610	43581	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2072-1	NZ_JEFT01000011.1	-	56148	56119	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2042-1	NZ_JEFX01000012.1	-	36390	36361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2108-1	NZ_JEFN01000005.1	-	59118	59089	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2076-1	NZ_JEFS01000016.1	-	25227	25198	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3351-1	NZ_JIKK01000013.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3326-1	NZ_JILJ01000008.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3299-1	NZ_JIMK01000012.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1388-1	NZ_JBUH01000001.1	-	231344	231315	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3271-1	NZ_JINM01000015.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1423-1	NZ_JBUM01000011.1	-	81129	81100	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3237-1	NZ_JIOU01000001.1	-	56224	56195	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1465-1	NZ_JBUR01000008.1	-	61690	61661	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3193-1	NZ_JIQM01000010.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1508-1	NZ_JBUW01000015.1	-	35370	35341	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3367-1	NZ_JIJU01000014.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1555-1	NZ_JBVB01000007.1	-	111475	111446	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3350-1	NZ_JIKL01000010.1	-	56354	56325	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1393-1	NZ_JBUI01000001.1	-	25185	25156	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3318-1	NZ_JILR01000013.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3283-1	NZ_JINA01000007.1	-	18519	18490	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1431-1	NZ_JBUN01000009.1	-	7477	7448	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3270-1	NZ_JINN01000013.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1480-1	NZ_JBUS01000012.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3234-1	NZ_JIOX01000011.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1513-1	NZ_JBUX01000008.1	-	109368	109339	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3229-1	NZ_JIPC01000010.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1558-1	NZ_JBVC01000008.1	-	25029	25000	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3192-1	NZ_JIQN01000013.1	-	23148	23119	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3190-1	NZ_JIQP01000009.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1158-1	NZ_JBIB01000002.1	-	54889	54860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3358-1	NZ_JIKD01000012.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3352-1	NZ_JIKJ01000007.1	-	56354	56325	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1172-1	NZ_JOPW01000064.1	-	55306	55277	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3346-1	NZ_JIKP01000012.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1176-1	NZ_JOPN01000049.1	-	55239	55210	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3327-1	NZ_JILI01000015.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1175-1	NZ_JOPM01000079.1	-	48479	48450	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3309-1	NZ_JIMA01000009.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3273-1	NZ_JINK01000012.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1403-1	NZ_JBUJ01000008.1	-	58248	58219	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3242-1	NZ_JIOP01000015.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1452-1	NZ_JBUO01000008.1	-	111533	111504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3198-1	NZ_JIQH01000007.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1482-1	NZ_JBUT01000007.1	-	49861	49832	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3361-1	NZ_JIKA01000011.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1521-1	NZ_JBUY01000010.1	-	62303	62274	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3348-1	NZ_JIKN01000014.1	-	25790	25761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3316-1	NZ_JILT01000015.1	-	26023	25994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1533-1	NZ_JBUZ01000007.1	-	111873	111844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3314-1	NZ_JILV01000006.1	-	56352	56323	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1560-1	NZ_JBVD01000009.1	-	62053	62024	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3279-1	NZ_JINE01000013.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1583-1	NZ_JBVE01000001.1	-	49963	49934	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3276-1	NZ_JINH01000013.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1409-1	NZ_JBUC01000012.1	-	25998	25969	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3261-1	NZ_JINW01000011.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1415-1	NZ_JBUL01000002.1	-	217273	217244	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3253-1	NZ_JIOE01000008.1	-	56354	56325	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3201-1	NZ_JIQE01000003.1	-	56305	56276	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1456-1	NZ_JBUP01000010.1	-	56229	56200	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1462-1	NZ_JBUQ01000009.1	-	110386	110357	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3126-1	NZ_JITB01000012.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1484-1	NZ_JBUU01000002.1	-	61690	61661	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3138-1	NZ_JISP01000015.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1493-1	NZ_JBUV01000006.1	-	117314	117285	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3129-1	NZ_JISY01000012.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1551-1	NZ_JBVA01000011.1	-	56828	56799	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3391-1	NZ_JIHW01000010.1	-	54536	54507	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1604-1	NZ_JBVF01000006.1	-	112234	112205	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3173-1	NZ_JIRG01000010.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3149-1	NZ_JISE01000012.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3386-1	NZ_JJB01000012.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3168-1	NZ_JIRL01000019.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1173-1	NZ_JOPP01000047.1	-	55266	55237	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3164-1	NZ_JIRP01000014.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1171-1	NZ_JOPO01000040.1	-	55193	55164	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3148-1	NZ_JISF01000014.1	-	26023	25994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1234-1	NZ_JBTY01000001.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3145-1	NZ_JISI01000011.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1322-1	NZ_JBUD01000004.1	-	212475	212446	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3140-1	NZ_JISN01000008.1	-	2541	2512	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3176-1	NZ_JIRD01000012.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1283-1	NZ_JBUB01000010.1	-	62005	61976	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3150-1	NZ_JISD01000013.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1303-1	NZ_JBUC01000009.1	-	62354	62325	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3142-1	NZ_JISL01000013.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1386-1	NZ_JBUG01000011.1	-	81189	81160	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3370-1	NZ_JIJR01000008.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1277-1	NZ_JBUA01000006.1	-	94681	94652	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3184-1	NZ_JIQV01000013.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1381-1	NZ_JBUF01000011.1	-	36390	36361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3163-1	NZ_JIRQ01000012.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2442-1	NZ_JDDY01000011.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1216-1	NZ_JBTT01000019.1	-	1860	1831	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1191-1	NZ_JBTR01000006.1	-	61373	61344	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2389-1	NZ_JDES01000013.1	-	35318	35289	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1206-1	NZ_JBTS01000015.1	-	36413	36384	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2414-1	NZ_JDEX01000004.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1229-1	NZ_JBTW01000008.1	-	62105	62076	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-1230-1	NZ_JBTX01000001.1	-	238687	238658	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2424-1	NZ_JDFC01000011.1	-	62331	62302	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1155-1	NZ_JBJQ01000004.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2398-1	NZ_JDET01000011.1	-	35318	35289	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1265-1	NZ_JBTZ01000013.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2416-1	NZ_JDEY01000008.1	-	24714	24685	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1373-1	NZ_JBUE01000006.1	-	108030	108001	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2426-1	NZ_JDFD01000013.1	-	35847	35818	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1174-1	NZ_JOPX01000065.1	-	55322	55293	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2602-1	NZ_JBMQ01000004.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1225-1	NZ_JBTV01000007.1	-	61112	61083	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2606-1	NZ_JBNI01000001.1	-	25229	25200	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1220-1	NZ_JBTU01000016.1	-	35881	35852	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2580-1	NZ_JDGH01000008.1	-	56939	56910	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2566-1	NZ_JDZG01000011.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2520-1	NZ_JDZH01000007.1	-	121803	121774	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2479-1	NZ_JEUG01000001.1	-	233210	233181	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2489-1	NZ_JEUM01000013.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2518-1	NZ_JEVL01000007.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2559-1	NZ_JGFX01000009.1	-	34871	34842	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2573-1	NZ_JGHR01000013.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2633-1	NZ_JIXP01000012.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2446-1	NZ_JDGD01000014.1	-	15438	15409	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2515-1	NZ_JDZI01000002.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2578-1	NZ_JFSE01000001.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2491-1	NZ_JEUN01000013.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2632-1	NZ_JIXQ01000009.1	-	56348	56319	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2370-1	NZ_JDEP01000015.1	-	35216	35187	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2402-1	NZ_JDEU01000003.1	-	39489	39460	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2409-1	NZ_JDEV01000007.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2417-1	NZ_JDEZ01000006.1	-	25059	25030	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2418-1	NZ_JDFA01000008.1	-	61335	61306	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2647-1	NZ_JBLP01000001.1	-	215968	215939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2376-1	NZ_JDEQ01000012.1	-	35318	35289	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2383-1	NZ_JDER01000017.1	-	35042	35013	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2411-1	NZ_JDEW01000013.1	-	36055	36026	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2423-1	NZ_JDFB01000001.1	-	217173	217144	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2503-1	NZ_JDQG01000002.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2540-1	NZ_JGFH01000002.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2558-1	NZ_JGFW01000015.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2634-1	NZ_JIXO01000015.1	-	25829	25800	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2508-1	NZ_JDZJ01000012.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2533-1	NZ_JGFG01000001.1	-	4918	4889	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2538-1	NZ_JGHO01000011.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2544-1	NZ_JGHP01000003.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2429-1	NZ_JDDX01000014.1	-	36107	36078	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2593-1	NZ_JGGY01000001.1	-	15617	15588	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2575-1	NZ_JGGX01000007.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2625-1	NZ_JMBT01000062.1	-	15983	15954	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2449-1	NZ_JDYZ01000003.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2495-1	NZ_JGGV01000002.1	-	55197	55168	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2526-1	NZ_JGGW01000003.1	-	55216	55187	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2467-1	NZ_JDGT01000002.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2583-1	NZ_JDYP01000017.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2458-1	NZ_JGGU01000008.1	-	56173	56144	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-857-1	NZ_JBHL01000002.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-864-1	NZ_JBFO01000002.1	-	56895	56866	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-844-1	NZ_JBSM01000001.1	-	35014	34985	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-812-1	NZ_JDGM01000009.1	-	56895	56866	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-697-1	NZ_JFSN01000008.1	-	55000	54971	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-695-1	NZ_JGFN01000035.1	-	14467	14438	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-772-1	NZ_JGGM01000002.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-901-1	NZ_JGGN01000002.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-914-1	NZ_JGHM01000008.1	-	55315	55286	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-698-1	NZ_JDGI01000012.1	-	56940	56911	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-784-1	NZ_JDZN01000010.1	-	56502	56473	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-813-1	NZ_JGFT01000009.1	-	34482	34453	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-827-1	NZ_JGFU01000011.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-710-1	NZ_JGGJ01000004.1	-	55164	55135	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-707-1	NZ_JGHI01000005.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-751-1	NZ_JGHY01000012.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-883-1	NZ_JBOF01000005.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-893-1	NZ_JBEQ01000002.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-896-1	NZ_JDGB01000010.1	-	56939	56910	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-727-1	NZ_JDGG01000010.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-754-1	NZ_JFSM01000005.1	-	56993	56964	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-763-1	NZ_JGGL01000008.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-897-1	NZ_JGHL01000002.1	-	54839	54810	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-829-1	NZ_JGIA01000006.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-877-1	NZ_JIYB01000010.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-741-1	NZ_JDGG01000011.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-745-1	NZ_JETZ01000011.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-747-1	NZ_JEUE01000003.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-760-1	NZ_JEUJ01000021.1	-	32991	32962	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-828-1	NZ_JGFV01000005.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-715-1	NZ_JGGL01000013.1	-	34968	34939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-708-1	NZ_JGHJ01000001.1	-	56896	56867	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-764-1	NZ_JGHZ01000008.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-879-1	NZ_JIXZ01000015.1	-	26023	25994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-711-1	NZ_JDYX01000002.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-821-1	NZ_JEVC01000011.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-838-1	NZ_JEVH01000002.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-714-1	NZ_JDYW01000002.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-820-1	NZ_JEVB01000002.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-837-1	NZ_JEVG01000001.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-774-1	NZ_JEUS01000002.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-909-1	NZ_JGGO01000004.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-818-1	NZ_JEVA01000007.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-833-1	NZ_JEVE01000001.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-836-1	NZ_JEVF01000008.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-911-1	NZ_JGGQ01000003.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-831-1	NZ_JEVD01000006.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-806-1	NZ_JEUY01000001.1	-	56890	56861	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-910-1	NZ_JGGP01000013.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-1881-1	NZ_JDCV01000012.1	-	58694	58665	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1161-1	NZ_JBGI01000001.1	-	115280	115251	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1976-1	NZ_JDDJ01000009.1	-	61461	61432	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2702-1	NZ_CBWV010000285.1	+	3236	3265	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3050-1	NZ_JBGU01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2935-1	NZ_JDGC01000008.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2996-1	NZ_JFRX01000004.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2894-1	NZ_JFRY01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2973-1	NZ_JEUB01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2892-1	NZ_JEVQ01000001.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2862-1	NZ_JGFI01000005.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3013-1	NZ_JIVX01000016.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2876-1	NZ_JFRZ01000002.1	-	55051	55022	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2961-1	NZ_JETY01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2970-1	NZ_JEUC01000005.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2972-1	NZ_JEUD01000005.1	-	56790	56761	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3026-1	NZ_JDXY01000001.1	-	1675824	1675795	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2883-1	NZ_JGFJ01000014.1	-	34971	34942	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2857-1	NZ_JGHS01000010.1	-	54968	54939	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3092-1	NZ_JIUJ01000012.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3069-1	NZ_JIVG01000012.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3054-1	NZ_JBEZ01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3042-1	NZ_JBIW01000007.1	-	56994	56965	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3006-1	NZ_JBMK01000003.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3051-1	NZ_JBGO01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3022-1	NZ_JBMM01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2951-1	NZ_JDGF01000011.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2974-1	NZ_JDGL01000007.1	-	56940	56911	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2872-1	NZ_JDZF01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2969-1	NZ_JEUA01000013.1	-	34872	34843	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2889-1	NZ_JEVP01000011.1	-	56993	56964	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3062-1	NZ_JIVO01000013.1	-	26162	26133	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3014-1	NZ_JIVW01000016.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2948-1	NZ_JDGE01000007.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2965-1	NZ_JDGP01000009.1	-	56794	56765	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2891-1	NZ_JDZE01000003.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2861-1	NZ_JFSA01000002.1	-	54854	54825	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2987-1	NZ_JEUO01000013.1	-	34874	34845	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2866-1	NZ_JEVO01000016.1	-	34913	34884	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2884-1	NZ_JGFK01000007.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2885-1	NZ_JGFL01000019.1	-	34913	34884	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2895-1	NZ_JGIE01000009.1	-	34972	34943	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3076-1	NZ_JIUZ01000012.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3067-1	NZ_JIVI01000014.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3031-1	NZ_JBPA01000003.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3112-1	NZ_JITP01000016.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3094-1	NZ_JIUH01000008.1	-	53212	53183	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2938-1	NZ_JDYN01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2913-1	NZ_JGHA01000007.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3118-1	NZ_JITJ01000011.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2901-1	NZ_JGGZ01000007.1	-	55217	55188	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3120-1	NZ_JITH01000016.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→

Sau-2859-1	NZ_JDGU01000008.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2924-1	NZ_JDYO01000002.1	-	56993	56964	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2738-1	NZ_JBET01000002.1	-	25029	25000	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2671-1	NZ_JBGE01000011.1	-	110326	110297	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2686-1	NZ_JBEU01000002.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2668-1	NZ_JBGL01000001.1	-	35179	35150	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2664-1	NZ_JBGW01000001.1	-	626825	626796	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2756-1	NZ_JBOD01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2834-1	NZ_JFSD01000003.1	-	55116	55087	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2851-1	NZ_JEVM01000005.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2843-1	NZ_JGFY01000026.1	-	15832	15803	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2844-1	NZ_JGFZ01000004.1	-	27750	27721	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2713-1	NZ_JIWP01000013.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2681-1	NZ_JBMH01000008.1	-	113883	113854	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2812-1	NZ_JBMW01000001.1	-	238687	238658	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2785-1	NZ_JBNL01000003.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2726-1	NZ_JHEA01000010.1	-	54919	54890	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3993-1	NZ_ASZO01000074.1	-	61790	61761	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3992-1	NZ_AUPW01000016.1	+	65946	65975	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3988-1	NZ_AUPS01000015.1	+	42609	42638	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2718-1	NZ_JHEB01000009.1	-	56494	56465	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2808-1	NZ_JBRE01000003.1	-	25227	25198	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2743-1	NZ_JBMX01000003.1	-	56994	56965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2803-1	NZ_JBNS01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2753-1	NZ_JBOI01000004.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2836-1	NZ_JFSB01000009.1	-	56993	56964	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2835-1	NZ_JFSC01000005.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2694-1	NZ_JIXA01000010.1	-	56395	56366	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2852-1	NZ_JEVN01000007.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2845-1	NZ_JGGA01000010.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2712-1	NZ_JIWQ01000014.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2720-1	NZ_JHED01000008.1	-	54920	54891	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3989-1	NZ_AUPV01000011.1	+	18390	18419	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2719-1	NZ_JHEC01000014.1	-	28996	28967	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2778-1	NZ_JBPS01000005.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2682-1	NZ_JBPD01000001.1	-	57499	57470	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2730-1	NZ_JBQF01000003.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2799-1	NZ_JBJV01000008.1	-	57499	57470	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2816-1	NZ_JBLA01000002.1	-	56994	56965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2793-1	NZ_JBKV01000001.1	-	238854	238825	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2725-1	NZ_JHDZ01000008.1	+	52043	52072	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2724-1	NZ_JHDY01000010.1	+	55746	55775	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2831-1	NZ_JEUX01000013.1	-	15617	15588	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2721-1	NZ_JHDV01000014.1	-	54961	54932	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3990-1	NZ_AUPU01000015.1	+	65947	65976	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2770-1	NZ_JBJF01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2652-1	NZ_JBKF01000004.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2723-1	NZ_JHDX01000009.1	+	55746	55775	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3991-1	NZ_AUPT01000016.1	-	25833	25804	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2798-1	NZ_JBJX01000002.1	-	57001	56972	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2764-1	NZ_JBLC01000001.1	-	110684	110655	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2722-1	NZ_JHDW01000009.1	+	55746	55775	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3683-1	NZ_JBGQ01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3697-1	NZ_JBHG01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3680-1	NZ_JBEW01000006.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3695-1	NZ_JBFM01000003.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3725-1	NZ_JHPT01000009.1	-	54839	54810	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3731-1	NZ_JHPY01000018.1	-	54601	54572	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3711-1	NZ_JIFL01000015.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3733-1	NZ_JHTY01000067.1	+	18293	18322	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3652-1	NZ_JGGE01000007.1	-	55082	55053	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3641-1	NZ_JGIH01000019.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3739-1	NZ_JHQD01000034.1	-	1801	1772	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3742-1	NZ_JHTV01000022.1	-	25152	25123	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3732-1	NZ_JHTX01000003.1	-	54710	54681	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3692-1	NZ_JBGM01000002.1	-	56994	56965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3690-1	NZ_JBGZ01000002.1	-	56790	56761	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3660-1	NZ_JEVU01000005.1	-	56890	56861	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3663-1	NZ_JGGG01000011.1	-	34867	34838	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3727-1	NZ_JHPU01000026.1	-	54858	54829	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3741-1	NZ_JHQF01000031.1	-	55187	55158	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3735-1	NZ_JHQA01000009.1	-	54489	54460	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3713-1	NZ_JIFJ01000017.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3726-1	NZ_JHTW01000035.1	-	54627	54598	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3738-1	NZ_AJKC01000001.1	+	18638	18667	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4105-1	NZ_AVBR01000007.1	-	54901	54872	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3645-1	NZ_JEVT01000001.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3655-1	NZ_JGGF01000011.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3740-1	NZ_JHQE01000027.1	-	55261	55232	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3729-1	NZ_JHPW01000011.1	-	54780	54751	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3720-1	NZ_JIFC01000012.1	-	56390	56361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3745-1	NZ_ANPO01000022.1	-	54581	54552	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3668-1	NZ_JBQW01000006.1	-	117087	117058	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3649-1	NZ_JDZB01000004.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3736-1	NZ_JASL01000006.1	-	54744	54715	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3723-1	NZ_JHUH01000009.1	-	18886	18857	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3665-1	NZ_JDZA01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3737-1	NZ_JASK01000008.1	+	52532	52561	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3666-1	NZ_JDYZ01000006.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3-1	NZ_ABFA01000032.1	-	15628	15599	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-63-1	NC_007795.1	-	2182895	2182866	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-60-1	NC_002758.2	-	2247063	2247034	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-55-1	NC_002952.2	-	2274990	2274961	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-59-1	NC_009782.1	-	2248701	2248672	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-58-1	NC_003923.1	-	2197274	2197245	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-21-1	NC_007622.1	-	2134777	2134748	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-35-1	NC_002951.2	-	2172171	2172142	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-57-1	NC_002953.3	-	2176379	2176350	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-45-1	NC_009487.1	-	2277078	2277049	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-78-1	NC_009641.1	-	2240554	2240525	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-62-1	NC_002745.2	-	2170631	2170602	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-44-1	NC_009632.1	-	2276953	2276924	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-40-1	NC_013450.1	-	2193468	2193439	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-76-1	NC_017341.1	-	2266296	2266267	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-67-1	NC_017342.1	+	1146277	1146306	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4024-1	NZ_AMPF01000068.1	-	15521	15492	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-47-1	NC_017349.1	-	2132497	2132468	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-48-1	NC_016928.1	-	2140391	2140362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-43-1	NC_017763.1	-	2198775	2198746	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4038-1	NC_022222.1	-	2087639	2087610	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-73-1	NZ_GG730215.1	-	55940	55911	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-74-1	NZ_GG730248.1	-	57166	57137	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-32-1	NZ_GG730136.1	-	56479	56450	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-31-1	NZ_GG730266.1	-	56408	56379	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-25-1	NZ_GG700568.1	-	56291	56262	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-4096-1	NZ_GL638179.1	+	18326	18355	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-50-1	NZ_GG749318.1	-	55764	55735	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-41-1	NZ_GG770528.1	-	56131	56102	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-33-1	NZ_GG730293.1	-	56576	56547	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-52-1	NZ_GG730203.1	-	55609	55580	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-37-1	NZ_GG700611.1	-	55640	55611	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-29-1	NZ_GG774481.1	+	1087427	1087456	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-28-1	NZ_GG731509.1	-	56401	56372	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-4097-1	NZ_GL638212.1	+	18325	18354	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-24-1	NZ_GG749070.1	-	56614	56585	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-51-1	NZ_GG700626.1	-	56171	56142	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-49-1	NZ_GG749011.1	-	56128	56099	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-66-1	NZ_GG698162.1	+	52322	52351	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-26-1	NZ_GG700588.1	-	56037	56008	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-4104-1	NZ_GL538356.1	+	1145007	1145036	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3769-1	NZ_KB820900.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3803-1	NZ_KB821084.1	-	129644	129615	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3808-1	NZ_KB821121.1	-	234536	234507	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3770-1	NZ_KB820903.1	-	2188304	2188275	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3783-1	NZ_KB820952.1	-	170256	170227	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3776-1	NZ_KB820925.1	-	1613986	1613957	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3795-1	NZ_KB821037.1	-	472750	472721	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3773-1	NZ_KB820909.1	-	2209641	2209612	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3817-1	NZ_KB821167.1	-	239480	239451	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3807-1	NZ_KB821115.1	-	229502	229473	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3812-1	NZ_KB821128.1	-	1585082	1585053	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3820-1	NZ_KB821195.1	-	180341	180312	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3767-1	NZ_KB820894.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3824-1	NZ_KB821208.1	-	56783	56754	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3801-1	NZ_KB821081.1	-	126216	126187	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3802-1	NZ_KB821076.1	-	1638120	1638091	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3819-1	NZ_KB821188.1	-	183209	183180	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3799-1	NZ_KB821067.1	-	181606	181577	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3788-1	NZ_KB820982.1	-	114751	114722	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3814-1	NZ_KB821141.1	-	359642	359613	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3805-1	NZ_KB821105.1	-	1111629	1111600	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3822-1	NZ_KB821198.1	-	2190463	2190434	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3813-1	NZ_KB821144.1	-	57288	57259	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3818-1	NZ_KB821175.1	-	1680280	1680251	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3811-1	NZ_KB821137.1	-	114925	114896	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3775-1	NZ_KB820921.1	-	1705142	1705113	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3784-1	NZ_KB820963.1	-	1638154	1638125	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3800-1	NZ_KB821070.1	-	253442	253413	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3774-1	NZ_KB820916.1	-	1896448	1896419	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3809-1	NZ_KB821124.1	-	192056	192027	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3771-1	NZ_KB820912.1	-	1676207	1676178	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3794-1	NZ_KB821023.1	-	115012	114983	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3793-1	NZ_KB821021.1	-	59768	59739	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3816-1	NZ_KB821155.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3806-1	NZ_KB821113.1	-	435020	434991	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3782-1	NZ_KB820938.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3786-1	NZ_KB820971.1	-	459385	459356	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3840-1	NZ_KB821307.1	-	468982	468953	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3848-1	NZ_KB821355.1	-	1644452	1644423	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3837-1	NZ_KB821284.1	-	124072	124043	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3804-1	NZ_KB821093.1	-	61324	61295	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3849-1	NZ_KB821366.1	-	230978	230949	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3828-1	NZ_KB821234.1	-	184607	184578	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3797-1	NZ_KB821056.1	-	198382	198353	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3791-1	NZ_KB821003.1	-	200561	200532	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3850-1	NZ_KB821373.1	-	58248	58219	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3798-1	NZ_KB821045.1	-	56967	56938	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3785-1	NZ_KB820966.1	-	1684535	1684506	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3906-1	NZ_KB821822.1	-	230922	230893	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3877-1	NZ_KB821568.1	-	232229	232200	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3868-1	NZ_KB821491.1	-	468075	468046	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3930-1	NZ_KB822033.1	-	56588	56559	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3825-1	NZ_KB821214.1	-	470766	470737	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3938-1	NZ_KB822062.1	-	468208	468179	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3951-1	NZ_KB822134.1	-	1633116	1633087	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3929-1	NZ_KB822014.1	-	49965	49936	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3889-1	NZ_KB821698.1	-	217486	217457	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3911-1	NZ_KB821846.1	-	231900	231871	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3879-1	NZ_KB821583.1	-	49963	49934	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3815-1	NZ_KB821139.1	-	417187	417158	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3940-1	NZ_KB822075.1	-	1587356	1587327	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3905-1	NZ_KB821817.1	-	60935	60906	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3870-1	NZ_KB821499.1	-	57430	57401	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3937-1	NZ_KB822053.1	-	231944	231915	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3838-1	NZ_KB821316.1	-	175381	175352	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3942-1	NZ_KB822082.1	-	925424	925395	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3885-1	NZ_KB821667.1	-	232434	232405	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3854-1	NZ_KB821402.1	-	222935	222906	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3931-1	NZ_KB822005.1	-	102504	102475	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3887-1	NZ_KB821650.1	-	172485	172456	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3860-1	NZ_KB821438.1	-	1666799	1666770	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3892-1	NZ_KB821706.1	-	100662	100633	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3875-1	NZ_KB821519.1	-	56762	56733	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3943-1	NZ_KB822376.1	-	54872	54843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3882-1	NZ_KB821615.1	-	57538	57509	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3982-1	NZ_KB822322.1	-	233801	233772	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3853-1	NZ_KB821387.1	-	109205	109176	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3865-1	NZ_KB821484.1	-	219814	219785	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3950-1	NZ_KB822128.1	-	401009	400980	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3863-1	NZ_KB821442.1	-	167231	167202	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3923-1	NZ_KB822366.1	-	61547	61518	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3894-1	NZ_KB821734.1	-	57586	57557	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3946-1	NZ_KB822105.1	-	105409	105380	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3904-1	NZ_KB821811.1	-	507764	507735	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3924-1	NZ_KB821972.1	-	25249	25220	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3953-1	NZ_KB822142.1	-	106748	106719	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3921-1	NZ_KB821932.1	-	231611	231582	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3971-1	NZ_KB822385.1	-	111190	111161	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3878-1	NZ_KB821575.1	-	229624	229595	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3925-1	NZ_KB821957.1	-	61593	61564	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3909-1	NZ_KB821826.1	-	233560	233531	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3845-1	NZ_KB821335.1	-	2130755	2130726	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3952-1	NZ_KB822138.1	-	229498	229469	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3834-1	NZ_KB821269.1	-	56603	56574	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3900-1	NZ_KB821789.1	+	61055	61084	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3917-1	NZ_KB821900.1	-	469540	469511	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3941-1	NZ_KB822074.1	-	55982	55953	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3893-1	NZ_KB821716.1	+	53720	53749	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3957-1	NZ_KB822184.1	-	58538	58509	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3839-1	NZ_KB821299.1	-	1190418	1190389	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3872-1	NZ_KB821506.1	-	1691566	1691537	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3796-1	NZ_KB821038.1	-	178180	178151	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3862-1	NZ_KB821450.1	-	176222	176193	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3884-1	NZ_KB821638.1	-	458897	458868	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3949-1	NZ_KB822114.1	+	1120890	1120919	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3855-1	NZ_KB821405.1	-	1639677	1639648	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3831-1	NZ_KB821253.1	-	194612	194583	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3830-1	NZ_KB821248.1	-	1686649	1686620	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3843-1	NZ_KB821317.1	-	56762	56733	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3842-1	NZ_KB821326.1	-	56154	56125	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3832-1	NZ_KB821262.1	-	231637	231608	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3835-1	NZ_KB821276.1	-	225444	225415	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3897-1	NZ_KB821760.1	-	464567	464538	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3912-1	NZ_KB821848.1	+	952842	952871	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1858-1	NZ_KI985158.1	-	238686	238657	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1866-1	NZ_KI985258.1	-	217786	217757	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1867-1	NZ_KI985276.1	-	36026	35997	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1980-1	NZ_KI989431.1	-	24749	24720	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1873-1	NZ_KI985536.1	-	61531	61502	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2017-1	NZ_KI990677.1	-	113811	113782	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1878-1	NZ_KI985707.1	-	143557	143528	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2023-1	NZ_KI990898.1	-	35180	35151	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1886-1	NZ_KI985949.1	-	133925	133896	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1762-1	NZ_KI992135.1	-	55326	55297	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1768-1	NZ_KI992364.1	-	55372	55343	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2271-1	NZ_KI992891.1	-	36491	36462	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-279-1	NZ_KI978876.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2280-1	NZ_KI993053.1	-	20693	20664	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2287-1	NZ_KI993232.1	-	123205	123176	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-281-1	NZ_KI978885.1	-	194479	194450	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→

Sau-2293-1	NZ_KI1993390.1	-	43602	43573	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1141-1	NZ_KI1979009.1	-	239541	239512	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2299-1	NZ_KI1993707.1	-	113749	113720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2304-1	NZ_KI1993857.1	-	79464	79435	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-859-1	NZ_KI1979238.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1969-1	NZ_KI1988913.1	-	118854	118825	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1755-1	NZ_KI1981742.1	-	61399	61370	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2009-1	NZ_KI1990354.1	-	28766	28737	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1764-1	NZ_KI1992236.1	-	113065	113036	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1777-1	NZ_KI1981979.1	-	54757	54728	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2276-1	NZ_KI1992998.1	-	78935	78906	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-294-1	NZ_KI1976868.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2285-1	NZ_KI1993140.1	-	116825	116796	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1134-1	NZ_KI1977602.1	-	112534	112505	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2291-1	NZ_KI1993346.1	-	55372	55343	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-852-1	NZ_KI1977780.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2297-1	NZ_KI1993607.1	-	55327	55298	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-855-1	NZ_KI1977949.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2302-1	NZ_KI1993828.1	-	62154	62125	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2614-1	NZ_KI1978573.1	-	110501	110472	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2308-1	NZ_KI1993984.1	-	35334	35305	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-888-1	NZ_KI1978673.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2242-1	NZ_KI1996121.1	-	25129	25100	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2273-1	NZ_KI1992923.1	-	25227	25198	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2283-1	NZ_KI1993098.1	-	15617	15588	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2294-1	NZ_KI1993454.1	-	29085	29056	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2296-1	NZ_KI1993543.1	-	56763	56734	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2305-1	NZ_KI1993943.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-863-1	NZ_KI1978799.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1760-1	NZ_KI1992041.1	-	70324	70295	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2270-1	NZ_KI1992811.1	-	36041	36012	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1098-1	NZ_KI1978949.1	-	111685	111656	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2279-1	NZ_KI1993025.1	-	35767	35738	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1138-1	NZ_KI1979264.1	-	110974	110945	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2298-1	NZ_KI1993612.1	-	25185	25156	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1754-1	NZ_KI1981682.1	-	54757	54728	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2303-1	NZ_KI1993830.1	-	131178	131149	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1775-1	NZ_KI1981936.1	-	56120	56091	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2309-1	NZ_KI1994027.1	-	35968	35939	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2264-1	NZ_KI1992684.1	-	35290	35261	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2251-1	NZ_KI1996449.1	-	35284	35255	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2260-1	NZ_KI1996704.1	-	291284	291255	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2640-1	NZ_KI1975748.1	-	111952	111923	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1124-1	NZ_KI1977461.1	-	235312	235283	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1135-1	NZ_KI1977932.1	-	238639	238610	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3827-1	NZ_KB821221.1	-	62154	62125	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3836-1	NZ_KB821280.1	-	58197	58168	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3826-1	NZ_KB821233.1	-	57586	57557	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3852-1	NZ_KB821382.1	-	61675	61646	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3895-1	NZ_KB821746.1	-	231536	231507	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3810-1	NZ_KB821130.1	-	2768476	2768447	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3888-1	NZ_KB821686.1	-	233138	233109	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3886-1	NZ_KB821678.1	-	1113791	1113762	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3857-1	NZ_KB821413.1	+	2436466	2436495	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3915-1	NZ_KB821872.1	-	61469	61440	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3874-1	NZ_KB821512.1	-	459630	459601	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3876-1	NZ_KB821535.1	-	179512	179483	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3866-1	NZ_KB821477.1	-	459748	459719	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3856-1	NZ_KB821410.1	-	414274	414245	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3864-1	NZ_KB821473.1	-	101203	101174	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3833-1	NZ_KB821272.1	-	2101380	2101351	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3792-1	NZ_KB821011.1	-	57688	57659	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3869-1	NZ_KB821500.1	-	101923	101894	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3880-1	NZ_KB821595.1	-	116823	116794	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3871-1	NZ_KB821504.1	-	1313322	1313293	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3861-1	NZ_KB821468.1	-	1493399	1493370	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3859-1	NZ_KB821431.1	-	123349	123320	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3847-1	NZ_KB821345.1	-	1062611	1062582	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3974-1	NZ_KB822266.1	-	2762750	2762721	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3962-1	NZ_KB822216.1	-	190880	190851	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3789-1	NZ_KB820997.1	-	61740	61711	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3947-1	NZ_KB822112.1	-	237858	237829	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3790-1	NZ_KB822350.1	-	229728	229699	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3965-1	NZ_KB822547.1	-	102904	102875	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3955-1	NZ_KB822161.1	-	59333	59304	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3821-1	NZ_KB822352.1	-	195129	195100	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3964-1	NZ_KB822228.1	-	231908	231879	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3944-1	NZ_KB822110.1	-	61121	61092	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3981-1	NZ_KB822299.1	-	421723	421694	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3970-1	NZ_KB822563.1	-	61444	61415	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3969-1	NZ_KB822552.1	-	1670678	1670649	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3980-1	NZ_KB822308.1	-	325379	325350	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3967-1	NZ_KB822238.1	-	229453	229424	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-34-1	NZ_GG730155.1	-	56187	56158	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-3956-1	NZ_KB822177.1	+	1184966	1184995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3858-1	NZ_KB821416.1	-	458073	458044	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3934-1	NZ_KB822067.1	-	238429	238400	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3975-1	NZ_KB822273.1	-	466868	466839	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3898-1	NZ_KB821769.1	-	57927	57898	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3960-1	NZ_KB822204.1	-	230327	230298	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4072-1	NZ_JH806525.1	+	18328	18357	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3926-1	NZ_KB821950.1	-	354313	354284	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3903-1	NZ_KB821777.1	-	1099170	1099141	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3977-1	NZ_KB822288.1	-	61009	60980	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3945-1	NZ_KB822087.1	-	215839	215810	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3918-1	NZ_KB821918.1	-	233981	233952	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3896-1	NZ_KB821749.1	-	57585	57556	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3958-1	NZ_KB822187.1	-	60783	60754	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3973-1	NZ_KB822261.1	-	61691	61662	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3963-1	NZ_KB822226.1	-	56762	56733	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3961-1	NZ_KB822208.1	-	1698775	1698746	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3883-1	NZ_KB821635.1	-	234212	234183	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3772-1	NZ_KB820906.1	-	1674159	1674130	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3959-1	NZ_KB822201.1	-	1063697	1063668	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3891-1	NZ_KB821711.1	-	60935	60906	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3902-1	NZ_KB821806.1	-	424380	424351	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3881-1	NZ_KB821605.1	-	115520	115491	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3913-1	NZ_KB821869.1	-	56763	56734	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3761-1	NZ_KB822326.1	-	232181	232152	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3919-1	NZ_KB821906.1	-	114248	114219	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3916-1	NZ_KB822368.1	-	109574	109545	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3968-1	NZ_KB822245.1	-	230562	230533	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3867-1	NZ_KB821486.1	-	1313769	1313740	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3762-1	NZ_KB822339.1	-	232013	231984	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3901-1	NZ_KB821798.1	-	57585	57556	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3972-1	NZ_KB822251.1	-	237694	237665	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3933-1	NZ_KB822049.1	-	102188	102159	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3927-1	NZ_KB821985.1	-	60324	60295	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3976-1	NZ_KB822264.1	-	1610982	1610953	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3966-1	NZ_KB822379.1	-	104248	104219	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3910-1	NZ_KB821839.1	-	57581	57552	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3936-1	NZ_KB822373.1	-	230489	230460	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3922-1	NZ_KB821953.1	-	105045	105016	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3928-1	NZ_KB822034.1	-	182165	182136	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3914-1	NZ_KB821925.1	-	230555	230526	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4093-1	NZ_KI669385.1	-	192582	192553	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3979-1	NZ_KB822296.1	-	230666	230637	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3935-1	NZ_KB822060.1	-	56193	56164	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4092-1	NZ_KI669391.1	+	1112462	1112491	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3763-1	NZ_KB822345.1	-	235630	235601	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3954-1	NZ_KB822171.1	-	545143	545114	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3932-1	NZ_KB821989.1	-	61902	61873	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3760-1	NZ_KB822317.1	-	56642	56613	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-331-1	NZ_KI966042.1	-	1673431	1673402	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1682-1	NZ_KI967573.1	-	118186	118157	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-339-1	NZ_KI966058.1	-	57585	57556	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-344-1	NZ_KI966065.1	-	107924	107895	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-598-1	NZ_KI966196.1	-	60037	60008	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-399-1	NZ_KI966087.1	-	56209	56180	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1676-1	NZ_KI967272.1	-	62156	62127	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1683-1	NZ_KI967631.1	-	112163	112134	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1689-1	NZ_KI967913.1	-	62153	62124	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1695-1	NZ_KI968141.1	-	16918	16889	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1709-1	NZ_KI969434.1	-	112994	112965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1716-1	NZ_KI969660.1	-	49963	49934	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1717-1	NZ_KI969744.1	-	62203	62174	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-398-1	NZ_KI966076.1	-	57163	57134	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1724-1	NZ_KI970048.1	-	54695	54666	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-602-1	NZ_KI966138.1	-	59482	59453	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1702-1	NZ_KI971027.1	-	402695	402666	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-603-1	NZ_KI966131.1	-	59482	59453	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1925-1	NZ_KI972225.1	-	61649	61620	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-588-1	NZ_KI966224.1	-	59482	59453	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2111-1	NZ_KI972814.1	-	230550	230521	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-589-1	NZ_KI966239.1	-	59692	59663	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-549-1	NZ_KI966323.1	-	64187	64158	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-1654-1	NZ_KI966474.1	-	12988	12959	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1668-1	NZ_KI967046.1	-	113920	113891	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-2268-1	NZ_KI972451.1	-	55454	55425	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1289-1	NZ_KI971633.1	-	1595760	1595731	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1194-1	NZ_KI971786.1	-	465526	465497	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1677-1	NZ_KI967404.1	-	61724	61695	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-2147-1	NZ_KI972833.1	-	235217	235188	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1697-1	NZ_KI968271.1	-	21252	21223	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1883-1	NZ_KI972146.1	-	234345	234316	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-2363-1	NZ_KI973005.1	-	56593	56564	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1984-1	NZ_KI972323.1	-	57587	57558	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-2095-1	NZ_KI972772.1	-	230296	230267	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1719-1	NZ_KI969805.1	-	54994	54965	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1726-1	NZ_KI970096.1	-	43785	43756	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1741-1	NZ_KI970705.1	-	61571	61542	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1815-1	NZ_KI972023.1	-	231732	231703	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-2368-1	NZ_KI973034.1	-	58943	58914	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1831-1	NZ_KI972040.1	-	233784	233755	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-605-1	NZ_KI966013.1	-	1657877	1657848	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-518-1	NZ_KI966340.1	-	60905	60876	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1656-1	NZ_KI966575.1	-	63214	63185	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1686-1	NZ_KI967724.1	-	35475	35446	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1662-1	NZ_KI966829.1	-	36390	36361	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1557-1	NZ_KI971102.1	-	56763	56734	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1669-1	NZ_KI967058.1	-	36295	36266	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1554-1	NZ_KI971422.1	-	56762	56733	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1596-1	NZ_KI971192.1	-	49963	49934	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1312-1	NZ_KI971667.1	-	398213	398184	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1461-1	NZ_KI971570.1	-	402113	402084	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1335-1	NZ_KI971720.1	-	61106	61077	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1237-1	NZ_KI971878.1	-	56852	56823	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1704-1	NZ_KI968528.1	-	55116	55087	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1750-1	NZ_KI971930.1	-	272475	272446	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1714-1	NZ_KI969563.1	-	5387	5358	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1907-1	NZ_KI972180.1	-	116961	116932	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1743-1	NZ_KI970708.1	-	27279	27250	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-601-1	NZ_KI966158.1	-	59483	59454	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1744-1	NZ_KI970818.1	-	62202	62173	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1776-1	NZ_KI971952.1	-	58283	58254	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1657-1	NZ_KI966643.1	-	35225	35196	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-2187-1	NZ_KI972860.1	-	828427	828398	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1663-1	NZ_KI966880.1	-	34180	34151	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1672-1	NZ_KI967105.1	-	35862	35833	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1628-1	NZ_KI971233.1	-	494957	494928	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1530-1	NZ_KI971392.1	-	113065	113036	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-600-1	NZ_KI966173.1	-	66056	66027	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-567-1	NZ_KI966294.1	-	59482	59453	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-551-1	NZ_KI966306.1	-	59679	59650	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1658-1	NZ_KI966704.1	-	62196	62167	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1734-1	NZ_KI970382.1	-	99800	99771	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1665-1	NZ_KI966922.1	-	58301	58272	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→
Sau-1673-1	NZ_KI967166.1	-	36412	36383	RNA →	rpmE2 (PRK01678)	Ribosomal_L31 (pfam01197)	→

Sau-1733-1	NZ_KI971070.1	-	173252	173223	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1674-1	NZ_KI967226.1	-	81102	81073	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1670-1	NZ_KI970968.1	-	58348	58319	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1280-1	NZ_KI971631.1	-	56763	56734	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1861-1	NZ_KI972120.1	-	58043	58014	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1740-1	NZ_KI970586.1	-	61333	61304	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1444-1	NZ_KI971546.1	-	56493	56464	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1483-1	NZ_KI971311.1	-	183428	183399	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1511-1	NZ_KI971375.1	-	56763	56734	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1696-1	NZ_KI968191.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1889-1	NZ_KI972165.1	-	253911	253882	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2199-1	NZ_KI972918.1	-	464236	464207	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1710-1	NZ_KI969464.1	-	2446	2417	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1711-1	NZ_KI969482.1	-	35467	35438	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1718-1	NZ_KI969749.1	-	35697	35668	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1298-1	NZ_KI971655.1	-	56843	56814	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1721-1	NZ_KI969874.1	-	59617	59588	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1727-1	NZ_KI970143.1	-	35100	35071	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1916-1	NZ_KI972193.1	-	57081	57052	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2374-1	NZ_KI973037.1	-	213705	213676	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1655-1	NZ_KI966501.1	-	55094	55065	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1723-1	NZ_KI971047.1	-	494175	494146	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1648-1	NZ_KI971263.1	-	118819	118790	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1319-1	NZ_KI971674.1	-	173915	173886	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1712-1	NZ_KI969558.1	-	61890	61861	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1706-1	NZ_KI968629.1	-	36512	36483	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1844-1	NZ_KI972088.1	-	227707	227678	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1703-1	NZ_KI968479.1	-	35162	35133	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2367-1	NZ_KI973007.1	-	56367	56338	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1728-1	NZ_KI970221.1	-	32991	32962	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1694-1	NZ_KI968123.1	-	62146	62117	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1745-1	NZ_KI970848.1	-	36005	35976	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1701-1	NZ_KI968449.1	-	35643	35614	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2094-1	NZ_KI972762.1	-	230995	230966	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1659-1	NZ_KI970964.1	-	61955	61926	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1637-1	NZ_KI971244.1	-	58248	58219	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2362-1	NZ_KI972975.1	-	2198240	2198211	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1520-1	NZ_KI971383.1	-	56459	56430	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1201-1	NZ_KI971799.1	-	180429	180400	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1840-1	NZ_KI972070.1	-	61630	61601	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1466-1	NZ_KI971272.1	-	56763	56734	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1747-1	NZ_KI970852.1	-	35561	35532	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1585-1	NZ_KI971155.1	-	56782	56753	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1272-1	NZ_KI971596.1	-	57586	57557	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2269-1	NZ_KI972465.1	-	58992	58963	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2358-1	NZ_KI972951.1	-	464468	464439	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1612-1	NZ_KI971209.1	-	465008	464979	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1708-1	NZ_KI968648.1	-	26789	26760	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1652-1	NZ_KI970947.1	-	56763	56734	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1258-1	NZ_KI971893.1	-	463233	463204	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1872-1	NZ_KI972138.1	-	54695	54666	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2239-1	NZ_KI972925.1	-	239945	239916	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→

Sau-2382-1	NZ_KI973077.1	-	25085	25056	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2198-1	NZ_KI972897.1	-	198468	198439	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1700-1	NZ_KI968406.1	-	61630	61601	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1722-1	NZ_KI969940.1	-	35400	35371	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1731-1	NZ_KI970334.1	-	62156	62127	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1691-1	NZ_KI971018.1	-	57585	57556	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1742-1	NZ_KI971082.1	-	405094	405065	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-280-1	NZ_KI973576.1	-	34872	34843	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-283-1	NZ_KI974226.1	-	120491	120462	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1699-1	NZ_KI968398.1	-	54833	54804	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1729-1	NZ_KI970276.1	-	56493	56464	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1472-1	NZ_KI971305.1	-	56763	56734	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-288-1	NZ_KI974232.1	-	56893	56864	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2274-1	NZ_KI972485.1	-	57586	57557	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-242-1	NZ_KI974540.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2379-1	NZ_KI973048.1	-	231806	231777	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-227-1	NZ_KI974962.1	-	55407	55378	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2782-1	NZ_KI973820.1	-	55262	55233	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-396-1	NZ_KI966105.1	-	55022	54993	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2032-1	NZ_KI972434.1	-	56417	56388	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2754-1	NZ_KI973379.1	-	34913	34884	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2742-1	NZ_KI973985.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-238-1	NZ_KI973531.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2650-1	NZ_KI974790.1	-	110356	110327	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-239-1	NZ_KI973724.1	-	57687	57658	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1101-1	NZ_KI974926.1	-	216089	216060	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2752-1	NZ_KI973351.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2757-1	NZ_KI973508.1	-	56508	56479	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2680-1	NZ_KI974183.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2762-1	NZ_KI974398.1	-	56000	55971	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1807-1	NZ_KI972001.1	-	476505	476476	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2679-1	NZ_KI973605.1	-	172385	172356	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2760-1	NZ_KI974240.1	-	117788	117759	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2646-1	NZ_KI974468.1	-	114326	114297	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2746-1	NZ_KI974843.1	-	111732	111703	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2745-1	NZ_KI974880.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2748-1	NZ_KI974888.1	-	34967	34938	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2777-1	NZ_KI976193.1	-	110423	110394	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2732-1	NZ_KI976327.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2651-1	NZ_KI976449.1	-	56643	56614	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2769-1	NZ_KI976741.1	-	163294	163265	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2784-1	NZ_KI973792.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2649-1	NZ_KI974493.1	-	112597	112568	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2776-1	NZ_KI975309.1	-	55262	55233	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2731-1	NZ_KI976242.1	-	111777	111748	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2763-1	NZ_KI976564.1	-	57686	57657	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2759-1	NZ_KI973929.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2774-1	NZ_KI975249.1	-	118410	118381	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2773-1	NZ_KI975250.1	-	113458	113429	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2740-1	NZ_KI975832.1	-	238778	238749	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2779-1	NZ_KI976188.1	-	238384	238355	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2765-1	NZ_KI976626.1	-	237053	237024	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→

Sau-2747-1	NZ_KI974841.1	-	62196	62167	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2749-1	NZ_KI975069.1	-	25249	25220	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2729-1	NZ_KI975199.1	-	119992	119963	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2750-1	NZ_KI975679.1	-	111359	111330	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1099-1	NZ_KI973769.1	-	56488	56459	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2751-1	NZ_KI975684.1	-	35284	35255	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2780-1	NZ_KI976171.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-240-1	NZ_KI974041.1	-	61027	60998	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2767-1	NZ_KI976602.1	-	35015	34986	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-245-1	NZ_KI974590.1	-	112127	112098	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2653-1	NZ_KI977062.1	-	19182	19153	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1605-1	NZ_KI971201.1	-	122322	122293	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1188-1	NZ_KI971784.1	-	56663	56634	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1661-1	NZ_KI966824.1	-	62005	61976	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1738-1	NZ_KI970529.1	-	58829	58800	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1368-1	NZ_KI971436.1	-	57585	57556	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-236-1	NZ_KI973490.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2328-1	NZ_KI972569.1	-	118224	118195	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-225-1	NZ_KI974722.1	-	119048	119019	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1420-1	NZ_KI971523.1	-	118776	118747	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1713-1	NZ_KI971041.1	-	467476	467447	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1500-1	NZ_KI971347.1	-	56521	56492	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2644-1	NZ_KI973974.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-229-1	NZ_KI974994.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-231-1	NZ_KI975047.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-233-1	NZ_KI975535.1	-	469077	469048	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1103-1	NZ_KI975861.1	-	107623	107594	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1154-1	NZ_KI974747.1	-	56828	56799	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-884-1	NZ_KI973539.1	-	100527	100498	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-241-1	NZ_KI974535.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-246-1	NZ_KI974603.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-230-1	NZ_KI975061.1	-	56994	56965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2605-1	NZ_KI973836.1	-	239089	239060	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-881-1	NZ_KI975875.1	-	113460	113431	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2603-1	NZ_KI973853.1	-	61889	61860	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1146-1	NZ_KI975396.1	-	238621	238592	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-291-1	NZ_KI975911.1	-	56994	56965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-302-1	NZ_KI976160.1	-	56994	56965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2611-1	NZ_KI975631.1	-	57506	57477	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-293-1	NZ_KI976683.1	-	239227	239198	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-243-1	NZ_KI974552.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2641-1	NZ_KI975976.1	-	107609	107580	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1102-1	NZ_KI975389.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1128-1	NZ_KI976091.1	-	35048	35019	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2620-1	NZ_KI976472.1	-	56994	56965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-235-1	NZ_KI975491.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1113-1	NZ_KI976543.1	-	107627	107598	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-234-1	NZ_KI975519.1	-	233482	233453	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1114-1	NZ_KI976959.1	-	628831	628802	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1131-1	NZ_KI977383.1	-	117531	117502	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1150-1	NZ_KI973423.1	-	54893	54864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1108-1	NZ_KI973888.1	-	118746	118717	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2618-1	NZ_KI974606.1	-	1344431	1344402	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2610-1	NZ_KI975651.1	-	58425	58396	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1125-1	NZ_KI975789.1	-	109375	109346	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1111-1	NZ_KI974177.1	-	57506	57477	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-286-1	NZ_KI976422.1	-	56267	56238	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1145-1	NZ_KI975105.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-846-1	NZ_KI976517.1	-	61690	61661	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-292-1	NZ_KI976620.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2638-1	NZ_KI975338.1	-	59010	58981	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-247-1	NZ_KI977331.1	-	61890	61861	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1165-1	NZ_KI975607.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2608-1	NZ_KI976071.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1095-1	NZ_KI975565.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2612-1	NZ_KI977119.1	-	115884	115855	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3021-1	NZ_KI974138.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-232-1	NZ_KI975573.1	-	239942	239913	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2817-1	NZ_KI974715.1	-	238688	238659	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-295-1	NZ_KI976942.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1109-1	NZ_KI973890.1	-	213618	213589	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1170-1	NZ_KI974428.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2645-1	NZ_KI974438.1	-	57225	57196	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1152-1	NZ_KI974611.1	-	118606	118577	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2639-1	NZ_KI975328.1	-	424201	424172	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1148-1	NZ_KI975476.1	-	56994	56965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3019-1	NZ_KI974078.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1126-1	NZ_KI975802.1	-	35013	34984	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2789-1	NZ_KI974201.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2607-1	NZ_KI976384.1	-	56258	56229	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2813-1	NZ_KI974294.1	-	25249	25220	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1129-1	NZ_KI976498.1	-	110548	110519	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3699-1	NZ_KI973666.1	-	56588	56559	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2790-1	NZ_KI974271.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2809-1	NZ_KI975113.1	-	110250	110221	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3689-1	NZ_KI973743.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3688-1	NZ_KI974031.1	-	237053	237024	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3701-1	NZ_KI974146.1	+	48532	48561	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3703-1	NZ_KI974376.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3028-1	NZ_KI974655.1	-	113124	113095	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2810-1	NZ_KI975172.1	-	57695	57666	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3018-1	NZ_KI975754.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2804-1	NZ_KI976335.1	-	35013	34984	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3032-1	NZ_KI977132.1	-	55117	55088	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3702-1	NZ_KI974426.1	-	58231	58202	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3029-1	NZ_KI974659.1	-	56588	56559	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2811-1	NZ_KI975174.1	-	216298	216269	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3025-1	NZ_KI975987.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3673-1	NZ_KI976036.1	-	239284	239255	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3023-1	NZ_KI976376.1	-	119659	119630	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2792-1	NZ_KI976774.1	-	35284	35255	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3670-1	NZ_KI974020.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3027-1	NZ_KI975953.1	-	121790	121761	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2797-1	NZ_KI976725.1	-	121803	121774	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3705-1	NZ_KI976952.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2802-1	NZ_KI973735.1	-	56890	56861	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2787-1	NZ_KI974371.1	-	110422	110393	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2807-1	NZ_KI976065.1	-	25258	25229	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2794-1	NZ_KI976690.1	-	58248	58219	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1471-1	NZ_KK010128.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1524-1	NZ_KK012312.1	-	35094	35065	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1541-1	NZ_KK013214.1	-	35398	35369	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2350-1	NZ_KI995645.1	-	36089	36060	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2387-1	NZ_KI997549.1	-	61851	61822	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2397-1	NZ_KI997918.1	-	213793	213764	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1568-1	NZ_KK014253.1	-	35305	35276	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2399-1	NZ_KI997937.1	-	118626	118597	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1516-1	NZ_KK012056.1	-	32527	32498	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2404-1	NZ_KI998095.1	-	110981	110952	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2421-1	NZ_KI998596.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1527-1	NZ_KK012536.1	-	110244	110215	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2247-1	NZ_KI996273.1	-	122904	122875	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1540-1	NZ_KK013208.1	-	25227	25198	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2359-1	NZ_KI996835.1	-	62199	62170	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1494-1	NZ_KK011060.1	-	35151	35122	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2366-1	NZ_KI997029.1	-	62104	62075	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1917-1	NZ_KI987117.1	-	110394	110365	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1499-1	NZ_KK011331.1	-	35760	35731	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2375-1	NZ_KI997218.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2384-1	NZ_KI997424.1	-	35349	35320	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1548-1	NZ_KK013557.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2395-1	NZ_KI997821.1	-	98284	98255	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1556-1	NZ_KK013787.1	-	35610	35581	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1965-1	NZ_KI988768.1	-	55131	55102	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2407-1	NZ_KI998233.1	-	35955	35926	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1564-1	NZ_KK014054.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2415-1	NZ_KI998474.1	-	21021	20992	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2425-1	NZ_KI998629.1	-	52040	52011	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1987-1	NZ_KI989651.1	-	56762	56733	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1460-1	NZ_KK009730.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2322-1	NZ_KI994432.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2003-1	NZ_KI990116.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2235-1	NZ_KI995970.1	-	35290	35261	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1514-1	NZ_KK011889.1	-	77885	77856	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2012-1	NZ_KI990411.1	-	83970	83941	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1519-1	NZ_KK012183.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2246-1	NZ_KI996258.1	-	150172	150143	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2434-1	NZ_KI991416.1	-	35701	35672	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1526-1	NZ_KK012427.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2365-1	NZ_KI997025.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2388-1	NZ_KI997568.1	-	35672	35643	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2435-1	NZ_KI991448.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2394-1	NZ_KI997810.1	-	514560	514531	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1756-1	NZ_KI991889.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2400-1	NZ_KI997959.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1539-1	NZ_KK013085.1	-	26900	26871	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2310-1	NZ_KI994065.1	-	62157	62128	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2406-1	NZ_KI998165.1	-	35156	35127	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1559-1	NZ_KK013862.1	-	114870	114841	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2422-1	NZ_KI998604.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1956-1	NZ_KI988450.1	-	76879	76850	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1565-1	NZ_KK014174.1	-	113266	113237	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2354-1	NZ_KI995816.1	-	35969	35940	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1983-1	NZ_KI989506.1	-	3698	3669	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2385-1	NZ_KI997468.1	-	35156	35127	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2403-1	NZ_KI998058.1	-	103696	103667	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1999-1	NZ_KI990012.1	-	125991	125962	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2408-1	NZ_KI998319.1	-	61384	61355	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2410-1	NZ_KI998325.1	-	36340	36311	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2021-1	NZ_KI990840.1	-	62157	62128	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2419-1	NZ_KI998493.1	-	35170	35141	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1180-1	NZ_KI998844.1	-	55131	55102	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2432-1	NZ_KI991367.1	-	36413	36384	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2378-1	NZ_KI997278.1	-	36491	36462	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1770-1	NZ_KI992468.1	-	70571	70542	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2412-1	NZ_KI998382.1	-	35390	35361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2266-1	NZ_KI992708.1	-	35936	35907	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2249-1	NZ_KI996364.1	-	498623	498594	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1203-1	NZ_KK000026.1	-	27865	27836	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2257-1	NZ_KI996580.1	-	3545	3516	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2275-1	NZ_KI992964.1	-	27699	27670	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1215-1	NZ_KK000626.1	-	35264	35235	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2396-1	NZ_KI997868.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2284-1	NZ_KI993105.1	-	35349	35320	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1178-1	NZ_KI998708.1	-	36172	36143	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2427-1	NZ_KI998671.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1182-1	NZ_KI998925.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2289-1	NZ_KI993273.1	-	216283	216254	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1321-1	NZ_KK004815.1	-	110935	110906	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2320-1	NZ_KI994356.1	-	23949	23920	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2413-1	NZ_KI998446.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1235-1	NZ_KK001260.1	-	109425	109396	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1933-1	NZ_KI987796.1	-	36390	36361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1307-1	NZ_KK004030.1	-	9107	9078	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1247-1	NZ_KK001698.1	-	238687	238658	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2401-1	NZ_KI998009.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2002-1	NZ_KI990083.1	-	114771	114742	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1271-1	NZ_KK002585.1	-	62105	62076	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2011-1	NZ_KI990359.1	-	61128	61099	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1186-1	NZ_KI999175.1	-	2421	2392	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2016-1	NZ_KI990652.1	-	56605	56576	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1195-1	NZ_KI999511.1	-	1611	1582	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2031-1	NZ_KI991141.1	-	56154	56125	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1205-1	NZ_KK000098.1	-	2518	2489	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2433-1	NZ_KI991414.1	-	81526	81497	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1752-1	NZ_KI991788.1	-	35329	35300	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1389-1	NZ_KK006830.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1211-1	NZ_KK000497.1	-	25129	25100	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2380-1	NZ_KI997336.1	-	62256	62227	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1251-1	NZ_KK001764.1	-	110415	110386	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1761-1	NZ_KI992078.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1270-1	NZ_KK002552.1	-	100428	100399	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1404-1	NZ_KK007400.1	-	52215	52186	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1765-1	NZ_KI992241.1	-	36491	36462	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1179-1	NZ_KI998742.1	-	36390	36361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1399-1	NZ_KK007204.1	-	119705	119676	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1766-1	NZ_KI992307.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1184-1	NZ_KI999066.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1405-1	NZ_KK007455.1	-	25264	25235	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1771-1	NZ_KI992525.1	-	55426	55397	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1412-1	NZ_KK007629.1	-	105070	105041	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1192-1	NZ_KI999469.1	-	107905	107876	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1418-1	NZ_KK007813.1	-	62057	62028	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1209-1	NZ_KK000279.1	-	2421	2392	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2262-1	NZ_KI992643.1	-	61990	61961	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1419-1	NZ_KK007920.1	-	62157	62128	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2286-1	NZ_KI993169.1	-	35990	35961	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1426-1	NZ_KK008138.1	-	35323	35294	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1217-1	NZ_KK000731.1	-	25029	25000	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1438-1	NZ_KK008729.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1255-1	NZ_KK001985.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1443-1	NZ_KK009013.1	-	34375	34346	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1261-1	NZ_KK002301.1	-	113854	113825	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1449-1	NZ_KK009222.1	-	56828	56799	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1268-1	NZ_KK002505.1	-	63488	63459	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1486-1	NZ_KK010739.1	-	56205	56176	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1299-1	NZ_KK003662.1	-	194176	194147	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1398-1	NZ_KK007165.1	-	26132	26103	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1208-1	NZ_KK000225.1	-	36390	36361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1411-1	NZ_KK007527.1	-	36177	36148	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1214-1	NZ_KK000556.1	-	2418	2389	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1429-1	NZ_KK008343.1	-	61334	61305	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1221-1	NZ_KK000817.1	-	36279	36250	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1442-1	NZ_KK008967.1	-	35730	35701	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1236-1	NZ_KK001262.1	-	217172	217143	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1455-1	NZ_KK009463.1	-	35974	35945	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1463-1	NZ_KK009790.1	-	36145	36116	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1238-1	NZ_KK001281.1	-	217172	217143	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1242-1	NZ_KK001486.1	-	62157	62128	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1394-1	NZ_KK006995.1	-	192301	192272	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1395-1	NZ_KK007015.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1243-1	NZ_KK001565.1	-	111533	111504	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1400-1	NZ_KK007261.1	-	67891	67862	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1249-1	NZ_KK001741.1	-	58247	58218	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1401-1	NZ_KK007264.1	-	50765	50736	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1254-1	NZ_KK001938.1	-	61872	61843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1406-1	NZ_KK007468.1	-	56418	56389	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1267-1	NZ_KK002428.1	-	118636	118607	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1407-1	NZ_KK007482.1	-	36225	36196	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1304-1	NZ_KK003871.1	-	36491	36462	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-1413-1	NZ_KK007634.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1414-1	NZ_KK007734.1	-	114172	114143	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1198-1	NZ_KI999796.1	-	28749	28720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1427-1	NZ_KK008172.1	-	35163	35134	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1204-1	NZ_KK000032.1	-	55130	55101	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1467-1	NZ_KK009893.1	-	30144	30115	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1218-1	NZ_KK000734.1	-	35215	35186	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1479-1	NZ_KK010576.1	-	61380	61351	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1390-1	NZ_KK006869.1	-	25227	25198	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1226-1	NZ_KK000948.1	-	36490	36461	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1396-1	NZ_KK007071.1	-	36390	36361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1233-1	NZ_KK001167.1	-	56086	56057	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1402-1	NZ_KK007347.1	-	62157	62128	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1240-1	NZ_KK001353.1	-	36491	36462	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1422-1	NZ_KK007990.1	-	6175	6146	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1428-1	NZ_KK008239.1	-	35607	35578	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1245-1	NZ_KK001682.1	-	61334	61305	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1446-1	NZ_KK009114.1	-	113893	113864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1269-1	NZ_KK002539.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1453-1	NZ_KK009347.1	-	36413	36384	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1282-1	NZ_KK002976.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1183-1	NZ_KI999003.1	-	2467	2438	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1468-1	NZ_KK010017.1	-	61805	61776	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1469-1	NZ_KK010031.1	-	8424	8395	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1187-1	NZ_KI999294.1	-	28749	28720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1189-1	NZ_KI999318.1	-	56493	56464	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1857-1	NZ_KI985139.1	-	215969	215940	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1219-1	NZ_KK000810.1	-	107780	107751	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1946-1	NZ_KI988207.1	-	112019	111990	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1263-1	NZ_KK002379.1	-	119174	119145	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1974-1	NZ_KI989131.1	-	36695	36666	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1266-1	NZ_KK002416.1	-	110123	110094	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1302-1	NZ_KK003802.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1981-1	NZ_KI989453.1	-	26580	26551	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2013-1	NZ_KI990459.1	-	36490	36461	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2019-1	NZ_KI990696.1	-	35503	35474	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2025-1	NZ_KI991022.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2431-1	NZ_KI991290.1	-	24739	24710	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2436-1	NZ_KI991526.1	-	61378	61349	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2673-1	NZ_KI978813.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1757-1	NZ_KI991896.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2744-1	NZ_KI976555.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1763-1	NZ_KI992197.1	-	54757	54728	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2265-1	NZ_KI992696.1	-	113715	113686	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2288-1	NZ_KI993242.1	-	35381	35352	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2300-1	NZ_KI993733.1	-	62256	62227	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2306-1	NZ_KI993956.1	-	107880	107851	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2768-1	NZ_KI976650.1	-	25095	25066	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2800-1	NZ_KI977253.1	-	25249	25220	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2818-1	NZ_KI977480.1	-	60074	60045	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2440-1	NZ_KI991672.1	-	36491	36462	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2428-1	NZ_KI991190.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2437-1	NZ_KI991531.1	-	35701	35672	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2317-1	NZ_KI994282.1	-	120140	120111	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2323-1	NZ_KI994449.1	-	35159	35130	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2443-1	NZ_KI991753.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2441-1	NZ_KI991745.1	-	25124	25095	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2331-1	NZ_KI994746.1	-	56149	56120	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2336-1	NZ_KI994986.1	-	35090	35061	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2352-1	NZ_KI995731.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2313-1	NZ_KI994181.1	-	37036	37007	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2325-1	NZ_KI994561.1	-	111473	111444	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2333-1	NZ_KI994804.1	-	36390	36361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2338-1	NZ_KI995065.1	-	35148	35119	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2405-1	NZ_KI998115.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2349-1	NZ_KI995640.1	-	61396	61367	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1197-1	NZ_KI999666.1	-	36413	36384	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2430-1	NZ_KI991285.1	-	61214	61185	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1210-1	NZ_KK000352.1	-	26067	26038	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2319-1	NZ_KI994335.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1222-1	NZ_KK000868.1	-	35170	35141	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2337-1	NZ_KI995029.1	-	35284	35255	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2342-1	NZ_KI995318.1	-	26613	26584	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1224-1	NZ_KK000942.1	-	117871	117842	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1231-1	NZ_KK001077.1	-	119874	119845	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2438-1	NZ_KI991621.1	-	94599	94570	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1232-1	NZ_KK001101.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1244-1	NZ_KK001577.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2316-1	NZ_KI994268.1	-	26559	26530	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2321-1	NZ_KI994414.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1250-1	NZ_KK001743.1	-	215988	215959	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2326-1	NZ_KI994570.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1293-1	NZ_KK003417.1	-	36390	36361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2329-1	NZ_KI994621.1	-	22790	22761	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1300-1	NZ_KK003735.1	-	61791	61762	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1305-1	NZ_KK003928.1	-	36491	36462	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2335-1	NZ_KI994913.1	-	54634	54605	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1317-1	NZ_KK004598.1	-	111224	111195	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1324-1	NZ_KK004885.1	-	60436	60407	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1329-1	NZ_KK005157.1	-	61801	61772	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2311-1	NZ_KI994155.1	-	190898	190869	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1358-1	NZ_KK006237.1	-	37057	37028	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2318-1	NZ_KI994328.1	-	62150	62121	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2341-1	NZ_KI995272.1	-	35284	35255	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2390-1	NZ_KI997593.1	-	35188	35159	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2346-1	NZ_KI995457.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1200-1	NZ_KI999903.1	-	151572	151543	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2364-1	NZ_KI996937.1	-	35318	35289	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1212-1	NZ_KK000534.1	-	65122	65093	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1252-1	NZ_KK001778.1	-	119887	119858	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2372-1	NZ_KI997187.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1278-1	NZ_KK002782.1	-	37084	37055	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2373-1	NZ_KI997194.1	-	213232	213203	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1291-1	NZ_KK003367.1	-	115636	115607	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2381-1	NZ_KI997418.1	-	58459	58430	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1296-1	NZ_KK003598.1	-	151040	151011	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2343-1	NZ_KI995366.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1308-1	NZ_KK004075.1	-	58187	58158	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2355-1	NZ_KI995873.1	-	36226	36197	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1314-1	NZ_KK004401.1	-	1461	1432	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2360-1	NZ_KI996842.1	-	34585	34556	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1326-1	NZ_KK004974.1	-	116790	116761	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1327-1	NZ_KK004981.1	-	37010	36981	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1338-1	NZ_KK005486.1	-	116912	116883	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2369-1	NZ_KI997125.1	-	60974	60945	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1339-1	NZ_KK005523.1	-	171217	171188	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2377-1	NZ_KI997228.1	-	35318	35289	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1193-1	NZ_KI999496.1	-	116493	116464	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2391-1	NZ_KI997674.1	-	109253	109224	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1275-1	NZ_KK002702.1	-	117105	117076	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1290-1	NZ_KK003277.1	-	35572	35543	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2420-1	NZ_KI998546.1	-	35801	35772	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1348-1	NZ_KK005851.1	-	130981	130952	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2334-1	NZ_KI994905.1	-	61334	61305	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1202-1	NZ_KI999924.1	-	36491	36462	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2339-1	NZ_KI995125.1	-	55231	55202	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1228-1	NZ_KK001064.1	-	109928	109899	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1248-1	NZ_KK001705.1	-	232070	232041	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2340-1	NZ_KI995267.1	-	24749	24720	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1273-1	NZ_KK002613.1	-	108221	108192	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2344-1	NZ_KI995407.1	-	35284	35255	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1279-1	NZ_KK002853.1	-	2466	2437	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2345-1	NZ_KI995448.1	-	215968	215939	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1286-1	NZ_KK003159.1	-	36393	36364	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2357-1	NZ_KI995960.1	-	62204	62175	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1292-1	NZ_KK003413.1	-	25129	25100	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2361-1	NZ_KI996884.1	-	25291	25262	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1297-1	NZ_KK003607.1	-	36492	36463	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2371-1	NZ_KI997144.1	-	12936	12907	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1309-1	NZ_KK004207.1	-	108037	108008	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1323-1	NZ_KK004825.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2392-1	NZ_KI997700.1	-	35990	35961	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1334-1	NZ_KK005353.1	-	118726	118697	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2393-1	NZ_KI997749.1	-	35711	35682	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1351-1	NZ_KK005962.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2324-1	NZ_KI994478.1	-	56277	56248	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2332-1	NZ_KI994753.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2347-1	NZ_KI995510.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2353-1	NZ_KI995810.1	-	36413	36384	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1534-1	NZ_KK012823.1	-	122391	122362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1518-1	NZ_KK012119.1	-	35384	35355	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1888-1	NZ_KI986039.1	-	24746	24717	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1547-1	NZ_KK013532.1	-	21758	21729	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1890-1	NZ_KI986058.1	-	54570	54541	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1522-1	NZ_KK012212.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1894-1	NZ_KI986254.1	-	35104	35075	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→

Sau-1567-1	NZ_KK014247.1	-	61380	61351	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1896-1	NZ_KI986312.1	-	56289	56260	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1906-1	NZ_KI986770.1	-	54695	54666	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1549-1	NZ_KK013599.1	-	55101	55072	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1909-1	NZ_KI986816.1	-	36119	36090	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1921-1	NZ_KI987324.1	-	43760	43731	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1898-1	NZ_KI986353.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1811-1	NZ_KI983623.1	-	54651	54622	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1910-1	NZ_KI986850.1	-	35287	35258	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1812-1	NZ_KI983692.1	-	54757	54728	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1935-1	NZ_KI987851.1	-	61891	61862	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1887-1	NZ_KI985955.1	-	61433	61404	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1819-1	NZ_KI983880.1	-	61430	61401	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1893-1	NZ_KI986224.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1905-1	NZ_KI986766.1	-	116758	116729	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1823-1	NZ_KI984111.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1913-1	NZ_KI987032.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1824-1	NZ_KI984172.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1892-1	NZ_KI986135.1	-	35377	35348	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1832-1	NZ_KI984424.1	-	61797	61768	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1924-1	NZ_KI987398.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1901-1	NZ_KI986519.1	-	35292	35263	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1839-1	NZ_KI984673.1	-	54994	54965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1902-1	NZ_KI986631.1	-	111669	111640	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1846-1	NZ_KI984939.1	-	54651	54622	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1914-1	NZ_KI987041.1	-	111532	111503	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1855-1	NZ_KI985103.1	-	61792	61763	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1928-1	NZ_KI987591.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1862-1	NZ_KI985187.1	-	49963	49934	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1942-1	NZ_KI988047.1	-	24103	24074	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1875-1	NZ_KI985644.1	-	56762	56733	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1948-1	NZ_KI988232.1	-	36390	36361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1882-1	NZ_KI985801.1	-	111898	111869	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1957-1	NZ_KI988497.1	-	21173	21144	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1813-1	NZ_KI983712.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1820-1	NZ_KI983954.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1912-1	NZ_KI986932.1	-	55136	55107	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1825-1	NZ_KI984221.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1919-1	NZ_KI987227.1	-	111530	111501	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1833-1	NZ_KI984431.1	-	35144	35115	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1920-1	NZ_KI987293.1	-	61749	61720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1926-1	NZ_KI987485.1	-	126282	126253	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1841-1	NZ_KI984804.1	-	26803	26774	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1927-1	NZ_KI987518.1	-	203212	203183	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1848-1	NZ_KI984951.1	-	111102	111073	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1856-1	NZ_KI985109.1	-	113831	113802	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1932-1	NZ_KI987777.1	-	108267	108238	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1864-1	NZ_KI985225.1	-	62105	62076	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1941-1	NZ_KI987988.1	-	25168	25139	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1947-1	NZ_KI988220.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1871-1	NZ_KI985527.1	-	61434	61405	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1899-1	NZ_KI986431.1	-	212475	212446	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-1876-1	NZ_KI985685.1	-	177827	177798	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1904-1	NZ_KI986675.1	-	36390	36361	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1877-1	NZ_KI985700.1	-	24749	24720	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1884-1	NZ_KI985807.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1911-1	NZ_KI986876.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1810-1	NZ_KI983559.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1918-1	NZ_KI987165.1	-	24749	24720	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1930-1	NZ_KI987653.1	-	81097	81068	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1816-1	NZ_KI983765.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1822-1	NZ_KI984061.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1931-1	NZ_KI987730.1	-	32891	32862	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1936-1	NZ_KI987962.1	-	113737	113708	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1827-1	NZ_KI984308.1	-	36490	36461	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1938-1	NZ_KI987963.1	-	239096	239067	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1828-1	NZ_KI984334.1	-	61334	61305	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1944-1	NZ_KI988094.1	-	25058	25029	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1837-1	NZ_KI984667.1	-	56763	56734	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1954-1	NZ_KI988428.1	-	26791	26762	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1843-1	NZ_KI984882.1	-	62156	62127	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1961-1	NZ_KI988618.1	-	212692	212663	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1845-1	NZ_KI984898.1	-	113835	113806	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1891-1	NZ_KI986108.1	-	49963	49934	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1854-1	NZ_KI985077.1	-	61542	61513	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1923-1	NZ_KI987331.1	-	61334	61305	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1860-1	NZ_KI985163.1	-	110439	110410	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1929-1	NZ_KI987601.1	-	35801	35772	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1868-1	NZ_KI985296.1	-	151137	151108	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1943-1	NZ_KI988056.1	-	36103	36074	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1874-1	NZ_KI985617.1	-	212631	212602	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1951-1	NZ_KI988269.1	-	116669	116640	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1953-1	NZ_KI988356.1	-	112019	111990	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1814-1	NZ_KI983758.1	-	64944	64915	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1821-1	NZ_KI984014.1	-	58248	58219	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1958-1	NZ_KI988547.1	-	111812	111783	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1826-1	NZ_KI984299.1	-	35013	34984	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1960-1	NZ_KI988571.1	-	212691	212662	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1834-1	NZ_KI984496.1	-	36390	36361	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1842-1	NZ_KI984850.1	-	215908	215879	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1849-1	NZ_KI984965.1	-	49963	49934	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1851-1	NZ_KI984994.1	-	49963	49934	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2244-1	NZ_KI996151.1	-	56764	56735	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-885-1	NZ_KI978043.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2267-1	NZ_KI992801.1	-	62204	62175	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2292-1	NZ_KI993348.1	-	61238	61209	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-226-1	NZ_KI978154.1	-	111076	111047	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2245-1	NZ_KI996196.1	-	54989	54960	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-853-1	NZ_KI978238.1	-	220164	220135	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2250-1	NZ_KI996381.1	-	35318	35289	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-886-1	NZ_KI978243.1	-	239301	239272	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2258-1	NZ_KI996669.1	-	5943	5914	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1159-1	NZ_KI978422.1	-	20728	20699	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-887-1	NZ_KI978548.1	-	35013	34984	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→

Sau-861-1	NZ_KI978733.1	-	56403	56374	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2301-1	NZ_KI993776.1	-	119058	119029	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2241-1	NZ_KI996065.1	-	36110	36081	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2248-1	NZ_KI996301.1	-	55372	55343	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2252-1	NZ_KI996482.1	-	35349	35320	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2254-1	NZ_KI996531.1	-	35898	35869	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2261-1	NZ_KI996725.1	-	35672	35643	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-890-1	NZ_KI979155.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1749-1	NZ_KI981588.1	-	36412	36383	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-296-1	NZ_KI976905.1	-	107173	107144	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-850-1	NZ_KI977560.1	-	107669	107640	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-250-1	NZ_KI977699.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2613-1	NZ_KI977844.1	-	56852	56823	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2615-1	NZ_KI978633.1	-	61789	61760	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-299-1	NZ_KI978780.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1097-1	NZ_KI978896.1	-	56994	56965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1772-1	NZ_KI981781.1	-	115444	115415	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2734-1	NZ_KI977873.1	-	56880	56851	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1778-1	NZ_KI982017.1	-	143557	143528	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3043-1	NZ_KI977944.1	-	56645	56616	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-891-1	NZ_KI976989.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3045-1	NZ_KI978159.1	-	90758	90729	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3672-1	NZ_KI978274.1	-	118921	118892	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1133-1	NZ_KI977398.1	-	111528	111499	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2678-1	NZ_KI976313.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1123-1	NZ_KI977413.1	-	240524	240495	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2814-1	NZ_KI976836.1	-	238123	238094	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-248-1	NZ_KI977505.1	-	34816	34787	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3035-1	NZ_KI977215.1	-	59010	58981	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1156-1	NZ_KI977699.1	-	49965	49936	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3671-1	NZ_KI977580.1	-	117552	117523	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2657-1	NZ_KI977740.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-856-1	NZ_KI977962.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2819-1	NZ_KI977852.1	-	238406	238377	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2616-1	NZ_KI978193.1	-	106543	106514	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2659-1	NZ_KI977995.1	-	19102	19073	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3044-1	NZ_KI978127.1	-	25029	25000	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2737-1	NZ_KI978649.1	-	115251	115222	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2739-1	NZ_KI975825.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1538-1	NZ_KK013038.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2781-1	NZ_KI976300.1	-	114787	114758	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2795-1	NZ_KI976795.1	-	117314	117285	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1544-1	NZ_KK013332.1	-	110285	110256	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2654-1	NZ_KI977000.1	-	19182	19153	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1613-1	NZ_KK016426.1	-	56093	56064	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3034-1	NZ_KI977152.1	-	107193	107164	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2771-1	NZ_KI977188.1	-	35071	35042	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1619-1	NZ_KK016776.1	-	36492	36463	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3041-1	NZ_KI977433.1	-	59010	58981	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2735-1	NZ_KI977911.1	-	35284	35255	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1630-1	NZ_KK017358.1	-	35246	35217	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2660-1	NZ_KI977970.1	-	238655	238626	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3046-1	NZ_KI978198.1	-	118242	118213	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1635-1	NZ_KK017643.1	-	16230	16201	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3047-1	NZ_KI978290.1	-	962431	962402	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3049-1	NZ_KI978514.1	-	149156	149127	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1370-1	NZ_KK018920.1	-	111870	111841	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2667-1	NZ_KI978541.1	-	111456	111427	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2683-1	NZ_KI978725.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2674-1	NZ_KI978826.1	-	56993	56964	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3676-1	NZ_KI978841.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2588-1	NZ_KK021149.1	-	56940	56911	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3053-1	NZ_KI979026.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-724-1	NZ_KK022333.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2672-1	NZ_KI979249.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3030-1	NZ_KI976484.1	-	25119	25090	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1492-1	NZ_KK011005.1	-	37315	37286	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2815-1	NZ_KI976882.1	-	34912	34883	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3033-1	NZ_KI977135.1	-	237869	237840	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1512-1	NZ_KK011855.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2801-1	NZ_KI977270.1	-	118641	118612	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1525-1	NZ_KK012360.1	-	37317	37288	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2656-1	NZ_KI977550.1	-	238684	238655	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3040-1	NZ_KI977638.1	-	58910	58881	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1543-1	NZ_KK013328.1	-	111936	111907	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2658-1	NZ_KI977831.1	-	61890	61861	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1553-1	NZ_KK013748.1	-	36491	36462	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3007-1	NZ_KI977892.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1563-1	NZ_KK014046.1	-	109373	109344	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2736-1	NZ_KI978070.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2661-1	NZ_KI978282.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1569-1	NZ_KK014352.1	-	111576	111547	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2665-1	NZ_KI978489.1	-	60162	60133	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1611-1	NZ_KK016386.1	-	36390	36361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1369-1	NZ_KK018861.1	-	217144	217115	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2669-1	NZ_KI978611.1	-	58910	58881	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2670-1	NZ_KI978696.1	-	56892	56863	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1375-1	NZ_KK019079.1	-	35364	35335	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-682-1	NZ_KK021052.1	-	35169	35140	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2684-1	NZ_KI978769.1	-	211074	211045	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2517-1	NZ_KK022591.1	-	2239603	2239574	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2504-1	NZ_KK022875.1	-	56994	56965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2536-1	NZ_KK023228.1	-	2240385	2240356	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1509-1	NZ_KK011811.1	-	115367	115338	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1536-1	NZ_KK012906.1	-	35687	35658	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1552-1	NZ_KK013743.1	-	123305	123276	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1574-1	NZ_KK014582.1	-	28890	28861	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1587-1	NZ_KK015127.1	-	29142	29113	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1598-1	NZ_KK015734.1	-	62157	62128	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1621-1	NZ_KK016884.1	-	49963	49934	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1632-1	NZ_KK017470.1	-	61337	61308	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1644-1	NZ_KK018094.1	-	62090	62061	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1072-1	NZ_KK021514.1	-	27192	27163	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-803-1	NZ_KK021567.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-1523-1	NZ_KK012278.1	-	60738	60709	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1535-1	NZ_KK012841.1	-	107715	107686	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2685-1	NZ_KI979084.1	-	153683	153654	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1545-1	NZ_KK013431.1	-	27285	27256	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1550-1	NZ_KK013704.1	-	111824	111795	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1642-1	NZ_KK017973.1	-	35605	35576	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-679-1	NZ_KK020982.1	-	56941	56912	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2238-1	NZ_KK021925.1	-	55904	55875	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1016-1	NZ_KK022619.1	-	2237211	2237182	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1591-1	NZ_KK015352.1	-	35169	35140	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1372-1	NZ_KK018965.1	-	63907	63878	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2706-1	NZ_KK021460.1	-	34873	34844	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1577-1	NZ_KK014667.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1589-1	NZ_KK015302.1	-	111429	111400	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-694-1	NZ_KK021452.1	-	56940	56911	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-152-1	NZ_KK220206.1	-	34754	34725	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-673-1	NZ_KK039814.1	-	34873	34844	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-419-1	NZ_KK097822.1	-	222887	222858	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2509-1	NZ_KK041010.1	-	34912	34883	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-337-1	NZ_KK099176.1	-	464015	463986	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3071-1	NZ_KK226598.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1085-1	NZ_KK039088.1	-	35209	35180	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-151-1	NZ_KK220145.1	-	56395	56366	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1036-1	NZ_KK041081.1	-	34817	34788	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-185-1	NZ_KK221386.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2207-1	NZ_KK039044.1	-	34862	34833	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2900-1	NZ_KK095025.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-313-1	NZ_KK099030.1	-	180328	180299	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1035-1	NZ_KK041118.1	-	34862	34833	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-139-1	NZ_KK219769.1	-	25612	25583	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2710-1	NZ_KK225426.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-731-1	NZ_KK039411.1	-	34872	34843	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-251-1	NZ_KK222651.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2700-1	NZ_KK225337.1	-	53513	53484	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1022-1	NZ_KK041284.1	-	55804	55775	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3057-1	NZ_KK226422.1	-	56441	56412	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-416-1	NZ_KK097804.1	-	56588	56559	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1021-1	NZ_KK041296.1	-	34873	34844	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2822-1	NZ_KK225732.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-145-1	NZ_KK220079.1	-	56310	56281	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-804-1	NZ_KK041645.1	-	34873	34844	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3061-1	NZ_KK226326.1	-	56210	56181	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-270-1	NZ_KK223267.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-898-1	NZ_KK039334.1	-	34872	34843	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2922-1	NZ_KK095176.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-94-1	NZ_KK218433.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1034-1	NZ_KK041147.1	-	34873	34844	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3081-1	NZ_KK226999.1	-	26023	25994	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3086-1	NZ_KK227206.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-202-1	NZ_KK221958.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1008-1	NZ_KK041409.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-815-1	NZ_KK041546.1	-	34872	34843	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→

Sau-2927-1	NZ_KK095216.1	-	29170	29141	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2675-1	NZ_KK224694.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-174-1	NZ_KK221018.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2823-1	NZ_KK225762.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-190-1	NZ_KK221571.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2828-1	NZ_KK225934.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-114-1	NZ_KK218941.1	-	55009	54980	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3079-1	NZ_KK226919.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3089-1	NZ_KK227338.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-275-1	NZ_KK223430.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3009-1	NZ_KK226022.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2827-1	NZ_KK225900.1	-	24379	24350	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3075-1	NZ_KK225773.1	-	53698	53669	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3084-1	NZ_KK227106.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2577-1	NZ_KK094808.1	-	35013	34984	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2691-1	NZ_KK225002.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2825-1	NZ_KK225836.1	-	24806	24777	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2688-1	NZ_KK224861.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2693-1	NZ_KK225109.1	-	56438	56409	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2907-1	NZ_KK038479.1	-	92275	92246	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2567-1	NZ_KK038957.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2904-1	NZ_KK038550.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2898-1	NZ_KK038628.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2903-1	NZ_KK038592.1	-	29243	29214	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2568-1	NZ_KK038929.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2854-1	NZ_KK040538.1	-	54999	54970	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2847-1	NZ_KK040724.1	-	54739	54710	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2555-1	NZ_KK040779.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2525-1	NZ_KK040917.1	-	54858	54829	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3004-1	NZ_KK040206.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2709-1	NZ_KK040748.1	-	54695	54666	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2563-1	NZ_KK040762.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2541-1	NZ_KK040861.1	-	54905	54876	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2511-1	NZ_KK040948.1	-	56895	56866	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3005-1	NZ_KK040197.1	-	57094	57065	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2853-1	NZ_KK040540.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2846-1	NZ_KK040730.1	-	56888	56859	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3011-1	NZ_KK226077.1	-	56336	56307	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3002-1	NZ_KK040256.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3001-1	NZ_KK040296.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2871-1	NZ_KK040488.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2860-1	NZ_KK040503.1	-	35442	35413	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2848-1	NZ_KK040659.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2570-1	NZ_KK038869.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-817-1	NZ_KK041442.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-796-1	NZ_KK041680.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-814-1	NZ_KK041583.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3136-1	NZ_KK228932.1	-	26023	25994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2880-1	NZ_KK040429.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2554-1	NZ_KK040817.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3495-1	NZ_KK070557.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2485-1	NZ_KK071187.1	-	35013	34984	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2474-1	NZ_KK070701.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1043-1	NZ_KK041058.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-816-1	NZ_KK041539.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2064-1	NZ_KK068774.1	-	36390	36361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-316-1	NZ_KK099049.1	-	1657695	1657666	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-427-1	NZ_KK097890.1	-	61690	61661	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-176-1	NZ_KK221090.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-187-1	NZ_KK221466.1	-	56305	56276	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-205-1	NZ_KK222053.1	-	56438	56409	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2099-1	NZ_KK224356.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2626-1	NZ_KK224503.1	-	56353	56324	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3497-1	NZ_KK095369.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2984-1	NZ_KK095312.1	-	2231827	2231798	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3544-1	NZ_KK095555.1	-	34972	34943	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2890-1	NZ_KK040372.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1053-1	NZ_KK041050.1	-	328859	328830	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2562-1	NZ_KK040771.1	-	235119	235090	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2532-1	NZ_KK040873.1	-	28693	28664	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2514-1	NZ_KK073114.1	-	55192	55163	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2582-1	NZ_KK038808.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1024-1	NZ_KK073057.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2455-1	NZ_KK038978.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3489-1	NZ_KK074863.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2542-1	NZ_KK040825.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-962-1	NZ_KK071614.1	-	54903	54874	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1435-1	NZ_KI971533.1	-	116484	116455	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-810-1	NZ_KK072686.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2591-1	NZ_KK038780.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-704-1	NZ_KK096038.1	-	56789	56760	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3619-1	NZ_KK040006.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1000-1	NZ_KK073013.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1042-1	NZ_KK041070.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2893-1	NZ_KK073491.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1006-1	NZ_KK041418.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3538-1	NZ_KK097292.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1331-1	NZ_KI971688.1	-	61711	61682	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2939-1	NZ_KK038351.1	-	25254	25225	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2920-1	NZ_KK038460.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2513-1	NZ_KK072349.1	-	2229291	2229262	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2944-1	NZ_KK075050.1	-	56645	56616	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2572-1	NZ_KK075358.1	-	56988	56959	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2055-1	NZ_KI972673.1	-	57557	57528	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2545-1	NZ_KK075468.1	-	54839	54810	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3511-1	NZ_KK038216.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2519-1	NZ_KK040927.1	-	232923	232894	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-834-1	NZ_KK072896.1	-	56892	56863	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-809-1	NZ_KK072626.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-647-1	NZ_KK076222.1	-	54999	54970	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2118-1	NZ_KK066962.1	-	36213	36184	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2497-1	NZ_KK071854.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2887-1	NZ_KK075168.1	-	56741	56712	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1092-1	NZ_KK096426.1	-	34874	34845	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2553-1	NZ_KK075434.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-805-1	NZ_KK041613.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1089-1	NZ_KK075606.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3642-1	NZ_KK074550.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1032-1	NZ_KK075777.1	-	55218	55189	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3482-1	NZ_KK075000.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-646-1	NZ_KK076258.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-761-1	NZ_KK071031.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3531-1	NZ_KK038182.1	-	56091	56062	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2579-1	NZ_KK075298.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-990-1	NZ_KK072916.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-671-1	NZ_KK076023.1	-	34970	34941	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1037-1	NZ_KK075763.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1028-1	NZ_KK075856.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2594-1	NZ_KK075244.1	-	55129	55100	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1055-1	NZ_KK075684.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-752-1	NZ_KK075969.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-991-1	NZ_KK072423.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2527-1	NZ_KK094731.1	-	25249	25220	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2906-1	NZ_KK038504.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2855-1	NZ_KK073344.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2468-1	NZ_KK096641.1	-	15617	15588	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3499-1	NZ_KK074762.1	-	34962	34933	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2481-1	NZ_KK224412.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2699-1	NZ_KK225314.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3058-1	NZ_KK226264.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2695-1	NZ_KK225169.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2727-1	NZ_KK225600.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-436-1	NZ_KK097984.1	-	56858	56829	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-363-1	NZ_KK099356.1	-	465519	465490	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2946-1	NZ_KK097098.1	-	19182	19153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-645-1	NZ_KK072543.1	-	55176	55147	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-197-1	NZ_KK221759.1	-	25790	25761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-477-1	NZ_KK098514.1	-	1677866	1677837	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-372-1	NZ_KK099440.1	-	57593	57564	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-357-1	NZ_KK099307.1	-	2100797	2100768	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-142-1	NZ_KK219997.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-216-1	NZ_KK222467.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-173-1	NZ_KK220987.1	-	55471	55442	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-429-1	NZ_KK097926.1	-	57675	57646	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-472-1	NZ_KK098444.1	-	61574	61545	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-264-1	NZ_KK223042.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-162-1	NZ_KK220613.1	-	55707	55678	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2587-1	NZ_KK094871.1	-	34972	34943	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-211-1	NZ_KK222290.1	-	1768	1739	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-442-1	NZ_KK098091.1	-	409713	409684	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-621-1	NZ_KK072459.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-390-1	NZ_KK099582.1	-	59481	59452	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-522-1	NZ_KK074253.1	-	35659	35630	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-184-1	NZ_KK221358.1	-	25790	25761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-189-1	NZ_KK221549.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-324-1	NZ_KK099086.1	-	1640651	1640622	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-360-1	NZ_KK099334.1	-	61691	61662	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-137-1	NZ_KK219743.1	-	56439	56410	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-122-1	NZ_KK219261.1	-	3263	3234	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-562-1	NZ_KK074340.1	-	36224	36195	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2599-1	NZ_KK096816.1	-	25255	25226	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-171-1	NZ_KK220922.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-876-1	NZ_KK224237.1	-	56390	56361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-462-1	NZ_KK098326.1	-	226837	226808	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2833-1	NZ_KK094970.1	-	34913	34884	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2921-1	NZ_KK095162.1	-	55084	55055	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-874-1	NZ_KK224189.1	-	56441	56412	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2915-1	NZ_KK095113.1	-	35168	35139	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2516-1	NZ_KK224471.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2997-1	NZ_KK095339.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-595-1	NZ_KK099762.1	-	59750	59721	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1651-1	NZ_KK018430.1	-	217332	217303	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1963-1	NZ_KI988686.1	-	113409	113380	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1970-1	NZ_KI988920.1	-	35742	35713	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1978-1	NZ_KI989249.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1979-1	NZ_KI989299.1	-	24749	24720	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1985-1	NZ_KI989585.1	-	61571	61542	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1986-1	NZ_KI989593.1	-	25029	25000	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1991-1	NZ_KI989778.1	-	62206	62177	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1994-1	NZ_KI989785.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2022-1	NZ_KI990875.1	-	175788	175759	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1962-1	NZ_KI988673.1	-	35180	35151	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1975-1	NZ_KI989201.1	-	56091	56062	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1990-1	NZ_KI989707.1	-	217268	217239	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2000-1	NZ_KI990071.1	-	61380	61351	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2005-1	NZ_KI990204.1	-	35421	35392	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1967-1	NZ_KI988891.1	-	62202	62173	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1989-1	NZ_KI989655.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2004-1	NZ_KI990131.1	-	35829	35800	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2020-1	NZ_KI990737.1	-	62257	62228	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3706-1	NZ_KI977880.1	-	56997	56968	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2024-1	NZ_KI990951.1	-	54994	54965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3677-1	NZ_KI978852.1	-	239539	239510	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3681-1	NZ_KI979204.1	-	58513	58484	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3678-1	NZ_KI978909.1	-	175828	175799	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3687-1	NZ_KI977321.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3707-1	NZ_KI978114.1	-	57605	57576	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1964-1	NZ_KI988761.1	-	62331	62302	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3679-1	NZ_KI979142.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3698-1	NZ_KI975542.1	-	60192	60163	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1973-1	NZ_KI989113.1	-	62156	62127	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3686-1	NZ_KI977286.1	-	34913	34884	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1995-1	NZ_KI989832.1	-	35563	35534	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1356-1	NZ_KK006186.1	-	58196	58167	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1384-1	NZ_KK006658.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1392-1	NZ_KK006921.1	-	36491	36462	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1430-1	NZ_KK008404.1	-	107989	107960	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1432-1	NZ_KK008462.1	-	62050	62021	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-1457-1	NZ_KK009531.1	-	28985	28956	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1464-1	NZ_KK009890.1	-	24262	24233	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1477-1	NZ_KK010450.1	-	61373	61344	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3841-1	NZ_KK010958.1	-	35474	35445	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1497-1	NZ_KK011269.1	-	58247	58218	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1498-1	NZ_KK011277.1	-	36188	36159	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1391-1	NZ_KK006918.1	-	111834	111805	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1417-1	NZ_KK007810.1	-	26012	25983	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1424-1	NZ_KK008053.1	-	108168	108139	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3038-1	NZ_KK019246.1	-	56418	56389	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1436-1	NZ_KK008599.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1437-1	NZ_KK008721.1	-	61334	61305	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1441-1	NZ_KK008960.1	-	114097	114068	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1447-1	NZ_KK009126.1	-	36392	36363	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3648-1	NZ_KK022617.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1448-1	NZ_KK009212.1	-	114343	114314	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3037-1	NZ_KK019319.1	-	35193	35164	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1470-1	NZ_KK010081.1	-	2000	1971	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3527-1	NZ_KK021203.1	-	34872	34843	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1485-1	NZ_KK010686.1	-	119529	119500	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1490-1	NZ_KK010894.1	-	37315	37286	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3514-1	NZ_KK020708.1	-	95189	95160	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1496-1	NZ_KK011178.1	-	55103	55074	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2950-1	NZ_KK022846.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1502-1	NZ_KK011440.1	-	61555	61526	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1408-1	NZ_KK007517.1	-	195989	195960	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1416-1	NZ_KK007738.1	-	113597	113568	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1434-1	NZ_KK008532.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1440-1	NZ_KK008864.1	-	61213	61184	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1454-1	NZ_KK009420.1	-	36491	36462	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1459-1	NZ_KK009661.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1185-1	NZ_KI999129.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1475-1	NZ_KK010309.1	-	111814	111785	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1481-1	NZ_KK010625.1	-	111577	111548	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1281-1	NZ_KK002970.1	-	62354	62325	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1489-1	NZ_KK010871.1	-	62005	61976	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1495-1	NZ_KK011169.1	-	61380	61351	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1287-1	NZ_KK003215.1	-	126484	126455	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1421-1	NZ_KK007928.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1288-1	NZ_KK003234.1	-	43829	43800	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1445-1	NZ_KK009087.1	-	145173	145144	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1294-1	NZ_KK003529.1	-	61480	61451	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1458-1	NZ_KK009644.1	-	108047	108018	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1306-1	NZ_KK003976.1	-	36861	36832	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1473-1	NZ_KK010162.1	-	82709	82680	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1311-1	NZ_KK004318.1	-	114419	114390	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1474-1	NZ_KK010214.1	-	25255	25226	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1336-1	NZ_KK005381.1	-	15850	15821	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1478-1	NZ_KK010455.1	-	36021	35992	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1341-1	NZ_KK005590.1	-	62005	61976	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1487-1	NZ_KK010743.1	-	35170	35141	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1505-1	NZ_KK011613.1	-	35397	35368	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→

Sau-1352-1	NZ_KK006057.1	-	114518	114489	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1366-1	NZ_KK006305.1	-	35908	35879	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1488-1	NZ_KK010792.1	-	178313	178284	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1476-1	NZ_KK010315.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1380-1	NZ_KK006558.1	-	117031	117002	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1507-1	NZ_KK011728.1	-	35371	35342	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1382-1	NZ_KK006578.1	-	116022	115993	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1503-1	NZ_KK011501.1	-	36513	36484	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1199-1	NZ_KI999874.1	-	28749	28720	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1504-1	NZ_KK011582.1	-	178484	178455	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1284-1	NZ_KK003030.1	-	65411	65382	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1510-1	NZ_KK011817.1	-	56781	56752	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1295-1	NZ_KK003538.1	-	36220	36191	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1517-1	NZ_KK012068.1	-	35253	35224	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1301-1	NZ_KK003741.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1501-1	NZ_KK011400.1	-	2500	2471	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1313-1	NZ_KK004322.1	-	36491	36462	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1318-1	NZ_KK004611.1	-	1824	1795	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1325-1	NZ_KK004904.1	-	2235	2206	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1330-1	NZ_KK005165.1	-	36491	36462	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1344-1	NZ_KK005683.1	-	62156	62127	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1349-1	NZ_KK005857.1	-	36390	36361	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1354-1	NZ_KK006093.1	-	114114	114085	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1383-1	NZ_KK006590.1	-	22238	22209	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1310-1	NZ_KK004215.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1315-1	NZ_KK004456.1	-	35757	35728	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-573-1	NZ_KI966278.1	-	59905	59876	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1316-1	NZ_KK004546.1	-	109745	109716	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1346-1	NZ_KK005738.1	-	35986	35957	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1687-1	NZ_KI967761.1	-	36281	36252	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1357-1	NZ_KK006191.1	-	56146	56117	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1692-1	NZ_KI967978.1	-	36579	36550	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1385-1	NZ_KK006727.1	-	36016	35987	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1698-1	NZ_KI968309.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1196-1	NZ_KI999558.1	-	36632	36603	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1207-1	NZ_KK000219.1	-	28749	28720	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1227-1	NZ_KK000992.1	-	7425	7396	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1320-1	NZ_KK004674.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1332-1	NZ_KK005270.1	-	114270	114241	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1333-1	NZ_KK005279.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1345-1	NZ_KK005685.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1350-1	NZ_KK005907.1	-	32991	32962	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1241-1	NZ_KK001441.1	-	25227	25198	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1285-1	NZ_KK003118.1	-	25185	25156	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1378-1	NZ_KK006456.1	-	94742	94713	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1337-1	NZ_KK005431.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1782-1	NZ_KI982238.1	-	113825	113796	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1343-1	NZ_KK005632.1	-	130992	130963	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1788-1	NZ_KI982535.1	-	61379	61350	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1355-1	NZ_KK006099.1	-	81276	81247	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1800-1	NZ_KI983038.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1805-1	NZ_KI983336.1	-	36390	36361	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→

Sau-1377-1	NZ_KK006414.1	-	113836	113807	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1190-1	NZ_KI999369.1	-	35872	35843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1340-1	NZ_KK005535.1	-	9413	9384	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1379-1	NZ_KK006465.1	-	36491	36462	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1783-1	NZ_KI982243.1	-	35387	35358	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1347-1	NZ_KK005768.1	-	35179	35150	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1789-1	NZ_KI982539.1	-	47628	47599	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1790-1	NZ_KI982579.1	-	55496	55467	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1795-1	NZ_KI982920.1	-	107814	107785	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1801-1	NZ_KI983087.1	-	11532	11503	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1802-1	NZ_KI983209.1	-	61379	61350	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1806-1	NZ_KI983445.1	-	25184	25155	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-583-1	NZ_KI966250.1	-	110430	110401	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1690-1	NZ_KI967971.1	-	26596	26567	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1725-1	NZ_KI970090.1	-	25227	25198	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1624-1	NZ_KK017043.1	-	15812	15783	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1626-1	NZ_KK017149.1	-	11533	11504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-892-1	NZ_KI979231.1	-	113578	113549	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1751-1	NZ_KI981591.1	-	81045	81016	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1650-1	NZ_KK018407.1	-	62157	62128	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1781-1	NZ_KI982144.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1593-1	NZ_KK015493.1	-	62156	62127	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1787-1	NZ_KI982431.1	-	54695	54666	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1617-1	NZ_KK016736.1	-	96856	96827	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1633-1	NZ_KK017532.1	-	35482	35453	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1792-1	NZ_KI982725.1	-	56593	56564	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1799-1	NZ_KI982988.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1804-1	NZ_KI983259.1	-	25185	25156	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-604-1	NZ_KI966123.1	-	63210	63181	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-599-1	NZ_KI966182.1	-	61249	61220	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1597-1	NZ_KK015613.1	-	28883	28854	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-300-1	NZ_KI978791.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-889-1	NZ_KI978849.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-278-1	NZ_KI979258.1	-	56995	56966	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1773-1	NZ_KI981785.1	-	70324	70295	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1342-1	NZ_KK018458.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1774-1	NZ_KI981898.1	-	61468	61439	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1779-1	NZ_KI982023.1	-	61894	61865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1371-1	NZ_KK018935.1	-	35170	35141	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1780-1	NZ_KI982082.1	-	36320	36291	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-619-1	NZ_KK022635.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1785-1	NZ_KI982294.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1786-1	NZ_KI982353.1	-	36491	36462	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1791-1	NZ_KI982675.1	-	25129	25100	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1579-1	NZ_KK014783.1	-	36139	36110	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1797-1	NZ_KI982953.1	-	49963	49934	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1638-1	NZ_KK017770.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1803-1	NZ_KI983216.1	-	35204	35175	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1809-1	NZ_KI983518.1	-	50063	50034	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1649-1	NZ_KK018347.1	-	62154	62125	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1374-1	NZ_KK019025.1	-	16360	16331	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1759-1	NZ_KI991973.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-1753-1	NZ_KI991857.1	-	61333	61304	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3525-1	NZ_KK021290.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-895-1	NZ_KK022550.1	-	34874	34845	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1599-1	NZ_KK015745.1	-	36750	36721	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1623-1	NZ_KK017004.1	-	107853	107824	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1629-1	NZ_KK017303.1	-	35334	35305	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1645-1	NZ_KK018155.1	-	62156	62127	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-678-1	NZ_KK021099.1	-	34874	34845	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3551-1	NZ_KK021976.1	-	25255	25226	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1600-1	NZ_KK015795.1	-	35719	35690	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2457-1	NZ_KK022793.1	-	123801	123772	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2949-1	NZ_KK022818.1	-	56940	56911	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2121-1	NZ_KK066900.1	-	62105	62076	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2115-1	NZ_KK067042.1	-	111347	111318	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2106-1	NZ_KK067270.1	-	36390	36361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2146-1	NZ_KK065789.1	-	36748	36719	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2124-1	NZ_KK066757.1	-	35379	35350	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2110-1	NZ_KK067172.1	-	35461	35432	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2154-1	NZ_KK065505.1	-	61121	61092	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2149-1	NZ_KK065701.1	-	54674	54645	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2143-1	NZ_KK065925.1	-	36181	36152	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2093-1	NZ_KK067569.1	-	24083	24054	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2128-1	NZ_KK066638.1	-	60124	60095	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-681-1	NZ_KK020994.1	-	34816	34787	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-699-1	NZ_KK023877.1	-	33076	33047	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-800-1	NZ_KK027143.1	-	34869	34840	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-824-1	NZ_KK027509.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-664-1	NZ_KK029115.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-667-1	NZ_KK029215.1	-	34863	34834	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-757-1	NZ_KK029350.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-785-1	NZ_KK041807.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-705-1	NZ_KK021611.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-693-1	NZ_KK023840.1	-	2239382	2239353	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-755-1	NZ_KK025445.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-762-1	NZ_KK025890.1	+	18543	18572	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-770-1	NZ_KK026102.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-790-1	NZ_KK026722.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-801-1	NZ_KK027198.1	-	32356	32327	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-825-1	NZ_KK027558.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-840-1	NZ_KK027859.1	-	56502	56473	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-783-1	NZ_KK029395.1	-	54878	54849	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-689-1	NZ_KK039752.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-782-1	NZ_KK041853.1	-	34864	34835	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-732-1	NZ_KK024821.1	-	57040	57011	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-739-1	NZ_KK024990.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-743-1	NZ_KK029255.1	-	34730	34701	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2934-1	NZ_KK021933.1	-	54878	54849	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2174-1	NZ_KK024197.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2869-1	NZ_KK023742.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2460-1	NZ_KK025154.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2942-1	NZ_KK024911.1	-	34864	34835	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2989-1	NZ_KK026829.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2988-1	NZ_KK026878.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2231-1	NZ_KK062836.1	-	101112	101083	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2966-1	NZ_KK028360.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2224-1	NZ_KK063022.1	-	15595	15566	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2219-1	NZ_KK063290.1	-	115797	115768	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2878-1	NZ_KK031157.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2956-1	NZ_KK031325.1	-	30759	30730	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2218-1	NZ_KK063294.1	-	36281	36252	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-907-1	NZ_KK024505.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2968-1	NZ_KK031580.1	-	35073	35044	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-931-1	NZ_KK025407.1	-	34874	34845	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2212-1	NZ_KK063495.1	-	49963	49934	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2991-1	NZ_KK031859.1	-	30812	30783	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-947-1	NZ_KK025832.1	-	25029	25000	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3492-1	NZ_KK032127.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-936-1	NZ_KK026316.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2201-1	NZ_KK063757.1	-	61749	61720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2940-1	NZ_KK022765.1	-	121855	121826	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2194-1	NZ_KK063959.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2963-1	NZ_KK025704.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-966-1	NZ_KK026630.1	-	56502	56473	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2990-1	NZ_KK026950.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-976-1	NZ_KK027088.1	-	56976	56947	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2188-1	NZ_KK064220.1	-	35462	35433	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-988-1	NZ_KK027269.1	-	25256	25227	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2896-1	NZ_KK031188.1	-	57033	57004	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-932-1	NZ_KK029535.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2897-1	NZ_KK031197.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2181-1	NZ_KK064488.1	-	108622	108593	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-950-1	NZ_KK029765.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2957-1	NZ_KK031395.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1005-1	NZ_KK030022.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2975-1	NZ_KK031628.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2176-1	NZ_KK064706.1	-	54695	54666	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2976-1	NZ_KK031665.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-858-1	NZ_KK047717.1	-	1678825	1678796	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-900-1	NZ_KK023995.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2992-1	NZ_KK031903.1	-	34772	34743	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2167-1	NZ_KK064958.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3493-1	NZ_KK032159.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-905-1	NZ_KK024562.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1622-1	NZ_KK016918.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2914-1	NZ_KK023853.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-854-1	NZ_KK047726.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2964-1	NZ_KK025714.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-860-1	NZ_KK019362.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1634-1	NZ_KK017640.1	-	36390	36361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2918-1	NZ_KK028274.1	-	34961	34932	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-929-1	NZ_KK025290.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2902-1	NZ_KK031248.1	-	34846	34817	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-948-1	NZ_KK025784.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2234-1	NZ_KK047930.1	-	43687	43658	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2959-1	NZ_KK031455.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2977-1	NZ_KK031711.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2228-1	NZ_KK062861.1	-	35170	35141	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-985-1	NZ_KK028757.1	-	19182	19153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2994-1	NZ_KK032014.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-940-1	NZ_KK029729.1	-	34773	34744	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2227-1	NZ_KK062912.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2917-1	NZ_KK021166.1	-	34773	34744	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1018-1	NZ_KK030137.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2223-1	NZ_KK063053.1	-	36390	36361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-848-1	NZ_KK019147.1	-	59010	58981	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2882-1	NZ_KK023322.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2943-1	NZ_KK024836.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2216-1	NZ_KK063340.1	-	64842	64813	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-906-1	NZ_KK024727.1	-	34874	34845	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2999-1	NZ_KK027403.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-949-1	NZ_KK025817.1	-	56941	56912	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2445-1	NZ_KK030612.1	-	34862	34833	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2877-1	NZ_KK031078.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-935-1	NZ_KK026006.1	-	34863	34834	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2941-1	NZ_KK031298.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2233-1	NZ_KK047970.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-965-1	NZ_KK026604.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2981-1	NZ_KK031750.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-923-1	NZ_KK028350.1	-	57199	57170	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2226-1	NZ_KK062953.1	-	96895	96866	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-986-1	NZ_KK028808.1	-	19182	19153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3039-1	NZ_KK019290.1	-	54764	54735	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2221-1	NZ_KK063145.1	-	49861	49832	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-925-1	NZ_KK029504.1	-	25062	25033	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2930-1	NZ_KK021792.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1003-1	NZ_KK029896.1	-	34874	34845	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2215-1	NZ_KK063417.1	-	111834	111805	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2962-1	NZ_KK025626.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1019-1	NZ_KK030205.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2205-1	NZ_KK063588.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2983-1	NZ_KK031848.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-851-1	NZ_KK047742.1	-	1679220	1679191	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2993-1	NZ_KK031941.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-997-1	NZ_KK072945.1	-	34874	34845	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2185-1	NZ_KK064346.1	+	117742	117771	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3491-1	NZ_KK032093.1	-	2229537	2229508	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-918-1	NZ_KK024778.1	-	2236157	2236128	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2958-1	NZ_KK031432.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-958-1	NZ_KK029827.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2179-1	NZ_KK064605.1	-	59118	59089	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3036-1	NZ_KK019241.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1039-1	NZ_KK030281.1	-	2238815	2238786	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1625-1	NZ_KK017092.1	-	36490	36461	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2881-1	NZ_KK023296.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-917-1	NZ_KK024797.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2982-1	NZ_KK027319.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-987-1	NZ_KK027315.1	-	56939	56910	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1631-1	NZ_KK017466.1	-	62257	62228	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2899-1	NZ_KK023472.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-959-1	NZ_KK029882.1	-	2252120	2252091	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-75-1	NZ_CABA01000062.1	-	16773	16744	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-2998-1	NZ_KK027252.1	-	2235915	2235886	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-847-1	NZ_KK019119.1	-	56794	56765	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2444-1	NZ_KK024715.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3000-1	NZ_KK027444.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1001-1	NZ_KK022887.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2459-1	NZ_KK025101.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2967-1	NZ_KK031544.1	-	35471	35442	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-922-1	NZ_KK028309.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3484-1	NZ_KK032086.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2470-1	NZ_KK025595.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-924-1	NZ_KK029438.1	-	25255	25226	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-960-1	NZ_KK029884.1	-	2237296	2237267	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2232-1	NZ_KK048054.1	-	101158	101129	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-849-1	NZ_KK019137.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-913-1	NZ_KK022144.1	-	55982	55953	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2225-1	NZ_KK063004.1	-	28766	28737	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-904-1	NZ_KK024427.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2214-1	NZ_KK063464.1	-	26628	26599	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-977-1	NZ_KK027082.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-998-1	NZ_KK027716.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2052-1	NZ_KK069221.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-941-1	NZ_KK029756.1	-	2237277	2237248	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1004-1	NZ_KK029957.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1616-1	NZ_KK016624.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2175-1	NZ_KK024257.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2569-1	NZ_KK038922.1	-	56895	56866	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1640-1	NZ_KK017841.1	-	28307	28278	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1641-1	NZ_KK017902.1	-	2421	2392	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2584-1	NZ_KK020717.1	-	34869	34840	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1646-1	NZ_KK018231.1	-	2421	2392	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2863-1	NZ_KK023001.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1580-1	NZ_KK014893.1	-	62256	62227	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2868-1	NZ_KK023547.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2463-1	NZ_KK025514.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2581-1	NZ_KK023799.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1586-1	NZ_KK015113.1	-	61277	61248	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2462-1	NZ_KK025523.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2841-1	NZ_KK028984.1	-	34862	34833	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1603-1	NZ_KK016033.1	-	61228	61199	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1620-1	NZ_KK016818.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2492-1	NZ_KK030749.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1610-1	NZ_KK016378.1	-	61369	61340	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2597-1	NZ_KK038693.1	-	34913	34884	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1359-1	NZ_KK018504.1	-	36392	36363	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2622-1	NZ_KK047755.1	-	57585	57556	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1636-1	NZ_KK017766.1	-	107508	107479	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1130-1	NZ_KK019217.1	-	56763	56734	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2788-1	NZ_KK047909.1	-	1673122	1673093	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1647-1	NZ_KK018303.1	-	117245	117216	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1060-1	NZ_KK030519.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2556-1	NZ_KK023258.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2236-1	NZ_KK021870.1	-	57040	57011	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2564-1	NZ_KK023376.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1107-1	NZ_KK047803.1	-	1683613	1683584	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2829-1	NZ_KK028877.1	-	56940	56911	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1581-1	NZ_KK014900.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2171-1	NZ_KK024130.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2666-1	NZ_KK047697.1	-	1708894	1708865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1073-1	NZ_KK023603.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2806-1	NZ_KK047849.1	-	2267822	2267793	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2617-1	NZ_KK047918.1	+	620873	620902	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1084-1	NZ_KK024366.1	-	34913	34884	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2600-1	NZ_KK021676.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1040-1	NZ_KK030295.1	-	34870	34841	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2535-1	NZ_KK023119.1	-	56940	56911	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2832-1	NZ_KK027642.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1061-1	NZ_KK030574.1	-	34773	34744	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2703-1	NZ_KK027868.1	-	34863	34834	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1132-1	NZ_KK047765.1	-	61246	61217	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2842-1	NZ_KK027964.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2537-1	NZ_KK030874.1	-	2244515	2244486	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1106-1	NZ_KK047819.1	-	252534	252505	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2548-1	NZ_KK030899.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1608-1	NZ_KK016202.1	-	36491	36462	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2592-1	NZ_KK038742.1	-	34871	34842	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2663-1	NZ_KK047703.1	-	240492	240463	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2624-1	NZ_KK047734.1	-	1731888	1731859	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2772-1	NZ_KK047773.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1167-1	NZ_KK047866.1	-	55137	55108	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2805-1	NZ_KK047827.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2733-1	NZ_KK047830.1	-	2196141	2196112	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1168-1	NZ_KK047922.1	-	1709647	1709618	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2609-1	NZ_KK047855.1	-	1123865	1123836	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1572-1	NZ_KK014503.1	-	115765	115736	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2623-1	NZ_KK019284.1	-	25062	25033	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2493-1	NZ_KK022189.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1590-1	NZ_KK015343.1	-	108273	108244	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2475-1	NZ_KK030727.1	-	56993	56964	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1363-1	NZ_KK018751.1	-	194096	194067	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2549-1	NZ_KK030912.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1059-1	NZ_KK030508.1	-	25166	25137	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2662-1	NZ_KK047710.1	-	56776	56747	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2621-1	NZ_KK047748.1	-	1679024	1678995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1094-1	NZ_KK039071.1	-	56892	56863	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2791-1	NZ_KK047784.1	-	55958	55929	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1080-1	NZ_KK039235.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2766-1	NZ_KK047798.1	-	230868	230839	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2642-1	NZ_KK047838.1	-	56762	56733	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1166-1	NZ_KK047870.1	-	2236752	2236723	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2741-1	NZ_KK047902.1	-	1723084	1723055	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2557-1	NZ_KK031009.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1562-1	NZ_KK013946.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2531-1	NZ_KK030789.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1360-1	NZ_KK018605.1	-	36413	36384	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2715-1	NZ_KK024671.1	-	34807	34778	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2487-1	NZ_KK026516.1	-	34826	34797	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1367-1	NZ_KK018811.1	-	2420	2391	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1054-1	NZ_KK023207.1	-	56940	56911	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2830-1	NZ_KK028950.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2471-1	NZ_KK030648.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2864-1	NZ_KK031045.1	-	2239804	2239775	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2586-1	NZ_KK020798.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2601-1	NZ_KK021735.1	-	30842	30813	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1433-1	NZ_KK008467.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2529-1	NZ_KK073242.1	-	34871	34842	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1570-1	NZ_KK014417.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1361-1	NZ_KK018612.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1074-1	NZ_KK023648.1	-	2239930	2239901	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3539-1	NZ_KK021748.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1571-1	NZ_KK014495.1	-	94568	94539	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1582-1	NZ_KK014951.1	-	118923	118894	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1614-1	NZ_KK016472.1	-	35286	35257	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1362-1	NZ_KK018658.1	-	1772	1743	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3595-1	NZ_KK026049.1	-	56652	56623	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1065-1	NZ_KK023463.1	-	2236651	2236622	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1075-1	NZ_KK023651.1	-	55804	55775	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3709-1	NZ_KK047684.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1041-1	NZ_KK030362.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3708-1	NZ_KK047688.1	-	1704238	1704209	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3674-1	NZ_KK047843.1	-	1673624	1673595	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-64-1	NC_017333.1	-	2238912	2238883	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1561-1	NZ_KK013917.1	-	62156	62127	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1578-1	NZ_KK014718.1	-	55189	55160	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3593-1	NZ_KK025962.1	-	33076	33047	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1584-1	NZ_KK014983.1	-	36390	36361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3586-1	NZ_KK028408.1	-	46630	46601	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1601-1	NZ_KK015846.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3577-1	NZ_KK032474.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1052-1	NZ_KK030433.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3591-1	NZ_KK032745.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3704-1	NZ_KK047880.1	-	1658923	1658894	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3594-1	NZ_KK025972.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3587-1	NZ_KK028466.1	-	46746	46717	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3588-1	NZ_KK028533.1	-	15176	15147	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3578-1	NZ_KK032489.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3601-1	NZ_KK032800.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3658-1	NZ_KK033002.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3696-1	NZ_KK047674.1	-	56228	56199	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3684-1	NZ_KK047888.1	-	237730	237701	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3496-1	NZ_KK023149.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3631-1	NZ_KK027664.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3507-1	NZ_KK032260.1	-	54968	54939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3664-1	NZ_KK033064.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3675-1	NZ_KK047678.1	-	2241127	2241098	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3691-1	NZ_KK047705.1	-	1675481	1675452	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3568-1	NZ_KK022849.1	-	2229307	2229278	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3504-1	NZ_KK023326.1	-	33076	33047	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3548-1	NZ_KK023919.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3508-1	NZ_KK032308.1	-	34841	34812	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3576-1	NZ_KK032381.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3584-1	NZ_KK032670.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3650-1	NZ_KK032923.1	-	55477	55448	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-795-1	NZ_KK041736.1	-	56993	56964	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3526-1	NZ_KK021419.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-787-1	NZ_KK041753.1	-	35209	35180	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3545-1	NZ_KK021833.1	-	56790	56761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-781-1	NZ_KK041899.1	-	19182	19153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3607-1	NZ_KK032863.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-661-1	NZ_KK041939.1	-	35066	35037	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3651-1	NZ_KK032992.1	-	2236249	2236220	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-725-1	NZ_KK022396.1	-	30868	30839	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3685-1	NZ_KK019345.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-740-1	NZ_KK025058.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-791-1	NZ_KK026781.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3558-1	NZ_KK024371.1	-	57040	57011	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-756-1	NZ_KK029293.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3575-1	NZ_KK025280.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-786-1	NZ_KK041769.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3503-1	NZ_KK028175.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-660-1	NZ_KK041973.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3506-1	NZ_KK032215.1	-	19182	19153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-722-1	NZ_KK022244.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3534-1	NZ_KK023872.1	-	2238473	2238444	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-788-1	NZ_KK026645.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3559-1	NZ_KK024423.1	-	56940	56911	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-839-1	NZ_KK027771.1	-	34772	34743	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3569-1	NZ_KK024897.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-771-1	NZ_KK029389.1	-	2236533	2236504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3612-1	NZ_KK027253.1	-	2240851	2240822	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-723-1	NZ_KK022328.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-759-1	NZ_KK026434.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3583-1	NZ_KK032605.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-794-1	NZ_KK028873.1	-	2236659	2236630	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3659-1	NZ_KK033045.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-742-1	NZ_KK029243.1	-	56891	56862	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-826-1	NZ_KK022877.1	-	2236712	2236683	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-777-1	NZ_KK026178.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2105-1	NZ_KK067350.1	-	36490	36461	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-792-1	NZ_KK026776.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2092-1	NZ_KK067612.1	-	236801	236772	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-802-1	NZ_KK027250.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-712-1	NZ_KK070316.1	-	2245370	2245341	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3599-1	NZ_KK071292.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-726-1	NZ_KK022489.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2152-1	NZ_KK065541.1	-	36806	36777	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-677-1	NZ_KK023680.1	-	35161	35132	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-778-1	NZ_KK026259.1	-	19182	19153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2130-1	NZ_KK066572.1	-	55458	55429	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-767-1	NZ_KK028585.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2090-1	NZ_KK067652.1	-	56044	56015	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3571-1	NZ_KK070199.1	-	1094703	1094674	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2978-1	NZ_KK070975.1	-	34870	34841	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3606-1	NZ_KK071564.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2502-1	NZ_KK070240.1	-	236894	236865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2447-1	NZ_KK070432.1	-	58560	58531	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2506-1	NZ_KK071935.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3610-1	NZ_KK071957.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2598-1	NZ_KK038666.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2161-1	NZ_KK065316.1	-	54697	54668	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2483-1	NZ_KK071147.1	-	34954	34925	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2158-1	NZ_KK065367.1	-	35190	35161	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2101-1	NZ_KK067484.1	-	35296	35267	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2498-1	NZ_KK071690.1	-	34973	34944	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2122-1	NZ_KK066887.1	-	62203	62174	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2114-1	NZ_KK067114.1	-	190679	190650	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2059-1	NZ_KK069017.1	-	36579	36550	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2084-1	NZ_KK067969.1	-	61690	61661	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1387-1	NZ_KI971464.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2087-1	NZ_KK067883.1	-	61546	61517	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2071-1	NZ_KK068467.1	-	25128	25099	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2051-1	NZ_KK069266.1	-	25029	25000	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2044-1	NZ_KK069594.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2062-1	NZ_KK068890.1	-	36390	36361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1062-1	NZ_KK033122.1	-	56644	56615	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2081-1	NZ_KK068115.1	-	8576	8547	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-717-1	NZ_KK070061.1	-	1690011	1689982	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-769-1	NZ_KK070254.1	-	1658420	1658391	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2069-1	NZ_KK068572.1	-	35669	35640	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2080-1	NZ_KK068152.1	-	32991	32962	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2073-1	NZ_KK068424.1	-	54564	54535	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2066-1	NZ_KK068711.1	-	2421	2392	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2060-1	NZ_KK068997.1	-	62153	62124	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2047-1	NZ_KK069374.1	-	24749	24720	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2037-1	NZ_KK069794.1	-	111530	111501	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-957-1	NZ_KK071339.1	-	34894	34865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-659-1	NZ_KK042057.1	-	34874	34845	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-633-1	NZ_KK042196.1	-	54968	54939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-635-1	NZ_KK029047.1	-	29278	29249	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-651-1	NZ_KK042077.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-625-1	NZ_KK042274.1	-	25255	25226	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-624-1	NZ_KK042282.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-290-1	NZ_KK047913.1	-	2192944	2192915	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-636-1	NZ_KK029097.1	-	121888	121859	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-649-1	NZ_KK042095.1	-	33080	33051	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-640-1	NZ_KK042104.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-618-1	NZ_KK042299.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-955-1	NZ_KK071439.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-613-1	NZ_KK022975.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-639-1	NZ_KK042131.1	-	25255	25226	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-617-1	NZ_KK042394.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-765-1	NZ_KK071370.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2040-1	NZ_KK069665.1	-	35499	35470	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-744-1	NZ_KK070618.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-799-1	NZ_KK072266.1	-	15832	15803	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1376-1	NZ_KI971452.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-973-1	NZ_KK071835.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-944-1	NZ_KK070909.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-797-1	NZ_KK072197.1	-	56883	56854	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1410-1	NZ_KI971503.1	-	58300	58271	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2088-1	NZ_KK067776.1	-	35384	35355	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-819-1	NZ_KK072733.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-981-1	NZ_KK071993.1	-	34865	34836	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1064-1	NZ_KK072299.1	-	31125	31096	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-749-1	NZ_KK070937.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2127-1	NZ_KK066657.1	-	35451	35422	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-644-1	NZ_KK022681.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-648-1	NZ_KK029104.1	-	2228793	2228764	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-720-1	NZ_KK070340.1	-	58240	58211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-974-1	NZ_KK070262.1	-	1639617	1639588	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-823-1	NZ_KK072797.1	-	56714	56685	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-701-1	NZ_KK070279.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2136-1	NZ_KK066349.1	-	91457	91428	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2141-1	NZ_KK065990.1	-	35404	35375	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2488-1	NZ_KK070113.1	-	54795	54766	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2971-1	NZ_KK070751.1	-	35013	34984	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2954-1	NZ_KK070449.1	-	1725436	1725407	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3574-1	NZ_KK070474.1	-	224376	224347	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2138-1	NZ_KK066185.1	-	35169	35140	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2132-1	NZ_KK066446.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3604-1	NZ_KK071651.1	-	25255	25226	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2496-1	NZ_KK071775.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2448-1	NZ_KK038990.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2986-1	NZ_KK071519.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2550-1	NZ_KK073273.1	-	55214	55185	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2499-1	NZ_KK072095.1	-	109235	109206	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1353-1	NZ_KI971738.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2500-1	NZ_KK072188.1	-	34967	34938	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1934-1	NZ_KI972241.1	-	57675	57646	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2523-1	NZ_KK073134.1	-	34862	34833	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1784-1	NZ_KI971981.1	-	56762	56733	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1945-1	NZ_KI972277.1	-	141138	141109	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3613-1	NZ_KK072381.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1365-1	NZ_KI971747.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1796-1	NZ_KI971983.1	-	234880	234851	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1937-1	NZ_KI972261.1	-	61715	61686	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1955-1	NZ_KI972284.1	-	880152	880123	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2007-1	NZ_KI972388.1	-	59768	59739	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2314-1	NZ_KI972526.1	-	228594	228565	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2327-1	NZ_KI972558.1	-	115301	115272	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-615-1	NZ_KK092943.1	-	34972	34943	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2867-1	NZ_KK093446.1	-	55983	55954	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2085-1	NZ_KI972742.1	-	234815	234786	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1968-1	NZ_KI972321.1	-	119786	119757	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2018-1	NZ_KI972401.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1002-1	NZ_KK028024.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2282-1	NZ_KI972493.1	-	401361	401332	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2315-1	NZ_KI972541.1	-	55259	55230	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2330-1	NZ_KI972603.1	-	474378	474349	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3532-1	NZ_KK038133.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-686-1	NZ_KK093676.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2476-1	NZ_KK092439.1	-	35556	35527	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2077-1	NZ_KI972732.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1853-1	NZ_KI972093.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3552-1	NZ_KK022059.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2041-1	NZ_KI972629.1	-	468563	468534	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3543-1	NZ_KK038080.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3520-1	NZ_KK020928.1	-	56940	56911	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2484-1	NZ_KK092708.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3567-1	NZ_KK038067.1	-	2160060	2160031	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2050-1	NZ_KI972665.1	-	61740	61711	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2058-1	NZ_KI972713.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2057-1	NZ_KI972702.1	-	216427	216398	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3540-1	NZ_KK022054.1	-	57040	57011	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3627-1	NZ_KK028083.1	-	34874	34845	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-683-1	NZ_KK093607.1	-	29170	29141	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3542-1	NZ_KK038087.1	-	2155644	2155615	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3533-1	NZ_KK038099.1	-	56940	56911	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2585-1	NZ_KK020778.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3573-1	NZ_KK038019.1	-	56877	56848	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3510-1	NZ_KK038233.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2933-1	NZ_KK038394.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2955-1	NZ_KK038274.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2925-1	NZ_KK038441.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3509-1	NZ_KK038264.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2931-1	NZ_KK038399.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-696-1	NZ_KK093807.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2947-1	NZ_KK038331.1	-	121725	121696	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2923-1	NZ_KK038451.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2919-1	NZ_KK038477.1	-	56789	56760	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3572-1	NZ_KK038059.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-688-1	NZ_KK093755.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-793-1	NZ_KK093938.1	-	55100	55071	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-920-1	NZ_KK094093.1	-	54889	54860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-908-1	NZ_KK094033.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1048-1	NZ_KK093310.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-894-1	NZ_KK093961.1	-	56889	56860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-967-1	NZ_KK094117.1	-	55199	55170	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-446-1	NZ_KK098159.1	-	400765	400736	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-395-1	NZ_KK099647.1	-	56709	56680	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-424-1	NZ_KK097860.1	-	470236	470207	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-444-1	NZ_KK098125.1	-	56419	56390	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-465-1	NZ_KK098357.1	-	121861	121832	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2480-1	NZ_KK094627.1	-	34973	34944	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3579-1	NZ_KK095731.1	-	55116	55087	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-111-1	NZ_KK218822.1	-	56439	56410	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2453-1	NZ_KK096504.1	-	34972	34943	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-493-1	NZ_KK098720.1	-	36391	36362	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-468-1	NZ_KK098407.1	-	58283	58254	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-365-1	NZ_KK099370.1	-	410097	410068	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3536-1	NZ_KK097202.1	-	34871	34842	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-422-1	NZ_KK097842.1	-	908056	908027	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-329-1	NZ_KK099108.1	-	466349	466320	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2451-1	NZ_KK094499.1	-	19182	19153	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-335-1	NZ_KK099161.1	-	1644242	1644213	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3597-1	NZ_KK095813.1	-	41430	41401	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-117-1	NZ_KK219060.1	-	1684	1655	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-915-1	NZ_KK096211.1	-	35013	34984	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-414-1	NZ_KK097788.1	-	56497	56468	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-355-1	NZ_KK099294.1	-	59967	59938	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-641-1	NZ_KK095880.1	-	34873	34844	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2937-1	NZ_KK097015.1	-	55117	55088	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-406-1	NZ_KK099723.1	-	57585	57556	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-775-1	NZ_KK096138.1	-	55250	55221	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-272-1	NZ_KK223341.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-591-1	NZ_KK099825.1	-	107062	107033	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-426-1	NZ_KK097878.1	-	56763	56734	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-358-1	NZ_KK099312.1	-	173069	173040	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-386-1	NZ_KK099532.1	-	59566	59537	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2637-1	NZ_KK224655.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-154-1	NZ_KK220279.1	-	56395	56366	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-970-1	NZ_KK094165.1	-	34940	34911	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-458-1	NZ_KK098272.1	-	61690	61661	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-125-1	NZ_KK219385.1	-	54858	54829	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2507-1	NZ_KK094656.1	-	34872	34843	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-362-1	NZ_KK099351.1	-	233436	233407	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-449-1	NZ_KK098183.1	-	1089082	1089053	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-367-1	NZ_KK099388.1	-	57279	57250	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-3070-1	NZ_KK226556.1	-	56354	56325	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-309-1	NZ_KK223593.1	-	29633	29604	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2209-1	NZ_KK094375.1	-	34873	34844	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-383-1	NZ_KK099521.1	-	462571	462542	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-473-1	NZ_KK098455.1	-	57586	57557	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-133-1	NZ_KK219580.1	-	56395	56366	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-496-1	NZ_KK098769.1	-	108030	108001	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-196-1	NZ_KK221721.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-843-1	NZ_KK223787.1	-	54494	54465	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-219-1	NZ_KK22532.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-609-1	NZ_KK223686.1	-	56439	56410	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-404-1	NZ_KK099699.1	-	118463	118434	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2714-1	NZ_KK225547.1	-	26024	25995	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-375-1	NZ_KK099461.1	-	1319543	1319514	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→

Sau-3554-1	NZ_KK095573.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3624-1	NZ_KK097427.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2689-1	NZ_KK224908.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3059-1	NZ_KK226275.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-869-1	NZ_KK223977.1	-	56305	56276	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2952-1	NZ_KK095283.1	-	55307	55278	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-161-1	NZ_KK220557.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-593-1	NZ_KK099779.1	-	56232	56203	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-676-1	NZ_KK095985.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-169-1	NZ_KK220854.1	-	2211	2182	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-368-1	NZ_KK099392.1	-	459748	459719	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-590-1	NZ_KK099840.1	-	59481	59452	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-208-1	NZ_KK222133.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-480-1	NZ_KK098543.1	-	56762	56733	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-88-1	NZ_KK218170.1	-	54759	54730	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-451-1	NZ_KK098208.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-456-1	NZ_KK098255.1	-	467917	467888	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-350-1	NZ_KK099258.1	-	459805	459776	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2953-1	NZ_KK095290.1	-	55137	55108	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-370-1	NZ_KK099415.1	-	57012	56983	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-460-1	NZ_KK098302.1	-	434310	434281	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-261-1	NZ_KK222954.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-441-1	NZ_KK098077.1	-	238988	238959	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-377-1	NZ_KK099474.1	-	57059	57030	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-91-1	NZ_KK218289.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-193-1	NZ_KK221644.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-157-1	NZ_KK220407.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-421-1	NZ_KK097837.1	-	246307	246278	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-127-1	NZ_KK219466.1	-	54814	54785	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-434-1	NZ_KK097963.1	-	399430	399401	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-393-1	NZ_KK099625.1	-	1650562	1650533	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-311-1	NZ_KK099010.1	+	55670	55699	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-342-1	NZ_KK099199.1	-	59941	59912	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-388-1	NZ_KK099558.1	-	63060	63031	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-179-1	NZ_KK221204.1	-	1732	1703	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-373-1	NZ_KK099448.1	-	1640441	1640412	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2465-1	NZ_KK094548.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-104-1	NZ_KK218547.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-109-1	NZ_KK218732.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-482-1	NZ_KK098582.1	-	56588	56559	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-432-1	NZ_KK097945.1	-	372981	372952	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-470-1	NZ_KK098421.1	-	109456	109427	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-378-1	NZ_KK099485.1	-	466934	466905	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-397-1	NZ_KK099653.1	-	1568744	1568715	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-580-1	NZ_KK098940.1	-	59584	59555	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-596-1	NZ_KK099745.1	-	59482	59453	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-135-1	NZ_KK219653.1	-	54858	54829	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-452-1	NZ_KK098220.1	+	681871	681900	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3108-1	NZ_KK227993.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-463-1	NZ_KK098335.1	-	58446	58417	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-131-1	NZ_KK219851.1	-	54858	54829	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1087-1	NZ_KK094299.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3096-1	NZ_KK227523.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1086-1	NZ_KK094251.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2450-1	NZ_KK094446.1	-	34871	34842	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-431-1	NZ_KK097940.1	-	61789	61760	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3661-1	NZ_KK097614.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3091-1	NZ_KK227403.1	-	56305	56276	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-164-1	NZ_KK220717.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3098-1	NZ_KK227605.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-181-1	NZ_KK221262.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-866-1	NZ_KK223867.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3103-1	NZ_KK227783.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-199-1	NZ_KK221848.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-871-1	NZ_KK224053.1	-	15457	15428	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3114-1	NZ_KK228187.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-487-1	NZ_KK098646.1	-	404926	404897	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3106-1	NZ_KK227907.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-439-1	NZ_KK098013.1	-	56745	56716	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3117-1	NZ_KK228324.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3131-1	NZ_KK228748.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-467-1	NZ_KK098392.1	-	56588	56559	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-475-1	NZ_KK098491.1	-	58997	58968	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3518-1	NZ_KK095445.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-332-1	NZ_KK099134.1	-	56588	56559	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-485-1	NZ_KK098623.1	-	58248	58219	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-166-1	NZ_KK220803.1	-	26185	26156	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-579-1	NZ_KK099886.1	-	237855	237826	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-417-1	NZ_KK097808.1	-	1414448	1414419	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-577-1	NZ_KK099906.1	-	58726	58697	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-582-1	NZ_KK098916.1	-	337935	337906	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-348-1	NZ_KK099241.1	-	119478	119449	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2456-1	NZ_KK038959.1	-	233095	233066	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3139-1	NZ_KK229019.1	-	53234	53205	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-106-1	NZ_KK218624.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3101-1	NZ_KK227710.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2208-1	NZ_KK039024.1	-	36293	36264	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-254-1	NZ_KK222726.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3124-1	NZ_KK228551.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1079-1	NZ_KK039281.1	-	34793	34764	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-318-1	NZ_KK099065.1	-	56568	56539	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3144-1	NZ_KK229110.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-735-1	NZ_KK039382.1	-	34970	34941	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-120-1	NZ_KK219160.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-899-1	NZ_KK039331.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3620-1	NZ_KK039998.1	-	70352	70323	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-352-1	NZ_KK099276.1	-	57586	57557	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-692-1	NZ_KK039589.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3502-1	NZ_KK040133.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-691-1	NZ_KK039640.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3626-1	NZ_KK039943.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-345-1	NZ_KK099219.1	-	461736	461707	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3494-1	NZ_KK040167.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2290-1	NZ_KI972513.1	-	476429	476400	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-401-1	NZ_KK099682.1	-	1641421	1641392	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3121-1	NZ_KK228395.1	-	56354	56325	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1083-1	NZ_KK039143.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-178-1	NZ_KK221159.1	-	56395	56366	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3152-1	NZ_KK229299.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-729-1	NZ_KK039514.1	-	34913	34884	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3111-1	NZ_KK228117.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-266-1	NZ_KK223125.1	-	56439	56410	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1081-1	NZ_KK039198.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3638-1	NZ_KK039930.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-201-1	NZ_KK221926.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-675-1	NZ_KK039788.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3602-1	NZ_KK040125.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-928-1	NZ_KK039302.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-213-1	NZ_KK222349.1	-	56439	56410	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-690-1	NZ_KK039683.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-85-1	NZ_KK218112.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2510-1	NZ_KK040956.1	-	34913	34884	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4040-1	NZ_ABWS01000010.1	-	56850	56821	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4021-1	NZ_AFTT01000003.1	-	54788	54759	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4026-1	NZ_AFNO01000007.1	-	54488	54459	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4011-1	NZ_AFTO01000031.1	-	25119	25090	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4018-1	NZ_AFTS01000008.1	-	54482	54453	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4007-1	NZ_AGTU01000208.1	+	6464	6493	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4022-1	NZ_AFTU01000056.1	-	54711	54682	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3073-1	NZ_KK226674.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2697-1	NZ_KK225236.1	-	25968	25939	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-454-1	NZ_KK098243.1	-	56418	56389	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3012-1	NZ_KK226129.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-353-1	NZ_KK099285.1	-	232864	232835	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2677-1	NZ_KK224759.1	-	56390	56361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-437-1	NZ_KK097990.1	-	467385	467356	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-159-1	NZ_KK220472.1	-	18748	18719	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-491-1	NZ_KK098694.1	-	1600347	1600318	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-403-1	NZ_KK099696.1	-	57586	57557	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-259-1	NZ_KK222863.1	-	56935	56906	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3016-1	NZ_KK226203.1	-	55550	55521	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-277-1	NZ_KK223489.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3064-1	NZ_KK226405.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-141-1	NZ_KK219948.1	-	54814	54785	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-993-1	NZ_KK096312.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1014-1	NZ_KK096345.1	-	56790	56761	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3066-1	NZ_KK226495.1	-	56354	56325	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-322-1	NZ_KK099076.1	-	1682860	1682831	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2820-1	NZ_KK225657.1	-	56395	56366	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-391-1	NZ_KK099601.1	-	59482	59453	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-30-1	NZ_GL397103.1	-	275482	275453	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2936-1	NZ_KK095262.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2985-1	NZ_KK095314.1	-	56790	56761	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3530-1	NZ_KK095505.1	-	25255	25226	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3656-1	NZ_KK093561.1	-	15617	15588	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3581-1	NZ_KK092334.1	-	25129	25100	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3561-1	NZ_KK095655.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3519-1	NZ_KK097131.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3549-1	NZ_KK097344.1	-	35013	34984	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3635-1	NZ_KK097502.1	-	25255	25226	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3585-1	NZ_KK095753.1	-	56992	56963	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3562-1	NZ_KK095700.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3640-1	NZ_KK097564.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2926-1	NZ_KK095190.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2960-1	NZ_KK095306.1	-	55166	55137	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3556-1	NZ_KK095597.1	-	55082	55053	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3596-1	NZ_KK095778.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2945-1	NZ_KK097035.1	-	19182	19153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3537-1	NZ_KK097238.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3625-1	NZ_KK097452.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-626-1	NZ_KK095848.1	-	55116	55087	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-447-1	NZ_KK098166.1	-	120192	120163	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-628-1	NZ_KK093018.1	-	34972	34943	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-687-1	NZ_KK093705.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-652-1	NZ_KK095905.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-706-1	NZ_KK096064.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-448-1	NZ_KK098177.1	-	36791	36762	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-474-1	NZ_KK098474.1	-	471096	471067	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-614-1	NZ_KK092835.1	-	34972	34943	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-685-1	NZ_KK093635.1	-	34756	34727	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-709-1	NZ_KK093823.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-658-1	NZ_KK093149.1	-	55082	55053	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-430-1	NZ_KK097929.1	-	1652335	1652306	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-435-1	NZ_KK097974.1	-	61771	61742	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-440-1	NZ_KK098041.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-445-1	NZ_KK098149.1	-	57586	57557	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-450-1	NZ_KK098195.1	-	57586	57557	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-606-1	NZ_KK098961.1	-	62155	62126	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-438-1	NZ_KK097995.1	-	466008	465979	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-425-1	NZ_KK097867.1	-	231594	231565	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-443-1	NZ_KK098104.1	-	469570	469541	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-453-1	NZ_KK098229.1	-	254240	254211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-459-1	NZ_KK098290.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-469-1	NZ_KK098416.1	-	56419	56390	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-479-1	NZ_KK098532.1	-	1650917	1650888	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-575-1	NZ_KK099949.1	-	59485	59456	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-703-1	NZ_KK096018.1	-	54999	54970	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-478-1	NZ_KK098526.1	-	784642	784613	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-483-1	NZ_KK098587.1	-	826998	826969	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-484-1	NZ_KK098605.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-490-1	NZ_KK098680.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-607-1	NZ_KK099001.1	-	976089	976060	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-495-1	NZ_KK098762.1	-	61689	61660	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-585-1	NZ_KK098836.1	-	60916	60887	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-728-1	NZ_KK096097.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-455-1	NZ_KK098247.1	-	57585	57556	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-461-1	NZ_KK098312.1	-	1097381	1097352	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-466-1	NZ_KK098379.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-471-1	NZ_KK098433.1	-	1674196	1674167	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-481-1	NZ_KK098572.1	-	1944061	1944032	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-486-1	NZ_KK098636.1	-	488835	488806	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-492-1	NZ_KK098700.1	-	56416	56387	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-592-1	NZ_KK099811.1	-	58064	58035	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-586-1	NZ_KK098796.1	-	59482	59453	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-581-1	NZ_KK098920.1	-	59482	59453	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-733-1	NZ_KK093853.1	-	34873	34844	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2211-1	NZ_KK094430.1	-	56434	56405	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2837-1	NZ_KK095014.1	-	56793	56764	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2916-1	NZ_KK095141.1	-	34872	34843	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1091-1	NZ_KK096393.1	-	35074	35045	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-415-1	NZ_KK097796.1	-	1631360	1631331	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2560-1	NZ_KK096785.1	-	55181	55152	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-314-1	NZ_KK099035.1	-	60257	60228	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1070-1	NZ_KK094214.1	-	34874	34845	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-319-1	NZ_KK099068.1	-	1269188	1269159	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-340-1	NZ_KK099188.1	-	57320	57291	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-351-1	NZ_KK099273.1	-	1590185	1590156	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-356-1	NZ_KK099300.1	-	1636052	1636023	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-361-1	NZ_KK099337.1	-	61553	61524	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-371-1	NZ_KK099427.1	-	1594352	1594323	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-746-1	NZ_KK092605.1	-	602	573	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-428-1	NZ_KK097904.1	-	114869	114840	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-349-1	NZ_KK099251.1	-	459747	459718	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-359-1	NZ_KK099321.1	-	1593274	1593245	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-364-1	NZ_KK099361.1	-	255990	255961	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-369-1	NZ_KK099403.1	-	460546	460517	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-374-1	NZ_KK099456.1	-	60524	60495	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-405-1	NZ_KK099718.1	-	56726	56697	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-1088-1	NZ_KK094350.1	-	56794	56765	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2464-1	NZ_KK094533.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2521-1	NZ_KK094681.1	-	15617	15588	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2595-1	NZ_KK094924.1	-	34913	34884	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2546-1	NZ_KK096768.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2840-1	NZ_KK096936.1	-	34913	34884	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2858-1	NZ_KK096966.1	-	54878	54849	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-902-1	NZ_KK093986.1	-	34913	34884	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-968-1	NZ_KK094143.1	-	34874	34845	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-418-1	NZ_KK097815.1	-	2121940	2121911	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-423-1	NZ_KK097848.1	-	1643406	1643377	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2909-1	NZ_KK095085.1	-	57030	57001	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-392-1	NZ_KK099615.1	-	244736	244707	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-945-1	NZ_KK096297.1	-	56894	56865	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2534-1	NZ_KK096682.1	-	19182	19153	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-2886-1	NZ_KK093486.1	-	56794	56765	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-315-1	NZ_KK099043.1	-	56467	56438	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-321-1	NZ_KK099074.1	-	238688	238659	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-734-1	NZ_KK093901.1	-	34873	34844	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-334-1	NZ_KK099151.1	-	1670304	1670275	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-341-1	NZ_KK099197.1	-	122934	122905	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→
Sau-916-1	NZ_KK096255.1	-	34913	34884	RNA →	rpmE2 (PRK01678)	Ribosomal_L31	(pfam01197)	→

Sau-347-1	NZ_KK099239.1	-	299829	299800	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1020-1	NZ_KK096369.1	-	55328	55299	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2466-1	NZ_KK094572.1	-	34871	34842	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2574-1	NZ_KK094758.1	-	35013	34984	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-835-1	NZ_KK096188.1	-	56987	56958	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2873-1	NZ_KK097003.1	-	55000	54971	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2253-1	NZ_KK096457.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2839-1	NZ_KK096872.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-312-1	NZ_KK099020.1	-	1063131	1063102	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-317-1	NZ_KK099057.1	-	1584677	1584648	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-330-1	NZ_KK099121.1	-	267595	267566	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-336-1	NZ_KK099170.1	-	1586288	1586259	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-402-1	NZ_KK099688.1	-	1609421	1609392	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2454-1	NZ_KK096555.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-346-1	NZ_KK099233.1	-	234593	234564	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3662-1	NZ_KK097659.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-464-1	NZ_KK098341.1	-	468366	468337	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-394-1	NZ_KK099633.1	-	133140	133111	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-343-1	NZ_KK099211.1	-	56663	56634	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-354-1	NZ_KK099287.1	-	465984	465955	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-379-1	NZ_KK099491.1	-	231563	231534	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-400-1	NZ_KK099667.1	-	59483	59454	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-594-1	NZ_KK099766.1	-	130624	130595	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-587-1	NZ_KK099859.1	-	2340216	2340187	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-387-1	NZ_KK099544.1	-	61697	61668	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3515-1	NZ_KK095401.1	-	34867	34838	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-380-1	NZ_KK099504.1	-	61507	61478	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-407-1	NZ_KK099728.1	-	60837	60808	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-494-1	NZ_KK098743.1	-	122322	122293	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-576-1	NZ_KK099921.1	-	61323	61294	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-919-1	NZ_KK0994076.1	-	25255	25226	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-584-1	NZ_KK098856.1	-	56240	56211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-656-1	NZ_KK095933.1	-	34972	34943	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-112-1	NZ_KK218847.1	-	55733	55704	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-123-1	NZ_KK219305.1	-	56310	56281	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-150-1	NZ_KK220114.1	-	31722	31693	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-92-1	NZ_KK218349.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-130-1	NZ_KK219549.1	-	54860	54831	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-98-1	NZ_KK218470.1	-	55289	55260	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-107-1	NZ_KK218658.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-129-1	NZ_KK219518.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-132-1	NZ_KK219900.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-155-1	NZ_KK220312.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-160-1	NZ_KK220514.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-165-1	NZ_KK220763.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-172-1	NZ_KK220954.1	-	55963	55934	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-177-1	NZ_KK221128.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-260-1	NZ_KK222914.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3080-1	NZ_KK226958.1	-	53265	53236	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-271-1	NZ_KK223311.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3085-1	NZ_KK227159.1	-	25965	25936	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-276-1	NZ_KK223462.1	-	30762	30733	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3099-1	NZ_KK227638.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-608-1	NZ_KK223626.1	-	56394	56365	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3143-1	NZ_KK229081.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-865-1	NZ_KK223829.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-188-1	NZ_KK221506.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-194-1	NZ_KK221684.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-136-1	NZ_KK219698.1	-	46806	46777	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3063-1	NZ_KK226363.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-206-1	NZ_KK222184.1	-	20478	20449	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3068-1	NZ_KK226529.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-214-1	NZ_KK222381.1	-	18988	18959	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3166-1	NZ_KK229800.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-267-1	NZ_KK223163.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-273-1	NZ_KK223372.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-307-1	NZ_KK223517.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-872-1	NZ_KK224086.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-878-1	NZ_KK224279.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2692-1	NZ_KK225056.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3090-1	NZ_KK227375.1	-	56354	56325	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-175-1	NZ_KK221058.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2821-1	NZ_KK225696.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2505-1	NZ_KK224434.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-257-1	NZ_KK222794.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-126-1	NZ_KK219434.1	-	56261	56232	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-269-1	NZ_KK223216.1	-	52550	52521	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-134-1	NZ_KK219611.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-274-1	NZ_KK223399.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-200-1	NZ_KK221878.1	-	54642	54613	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-873-1	NZ_KK224144.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-207-1	NZ_KK222088.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3082-1	NZ_KK227042.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-217-1	NZ_KK222503.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3087-1	NZ_KK227240.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-253-1	NZ_KK222701.1	-	18846	18817	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3095-1	NZ_KK227491.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-875-1	NZ_KK224222.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2676-1	NZ_KK224731.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2701-1	NZ_KK225372.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-144-1	NZ_KK220038.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-153-1	NZ_KK220240.1	-	55477	55448	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-158-1	NZ_KK220436.1	-	25968	25939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-163-1	NZ_KK220641.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-170-1	NZ_KK220886.1	-	31818	31789	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-180-1	NZ_KK221232.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-186-1	NZ_KK221416.1	-	56310	56281	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-209-1	NZ_KK222240.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-220-1	NZ_KK222577.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-215-1	NZ_KK222425.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-841-1	NZ_KK223720.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-222-1	NZ_KK222619.1	-	7609	7580	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2698-1	NZ_KK225257.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-258-1	NZ_KK222826.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2711-1	NZ_KK225491.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-263-1	NZ_KK223018.1	-	25790	25761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-308-1	NZ_KK223557.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2826-1	NZ_KK225869.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-842-1	NZ_KK223754.1	-	30994	30965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3115-1	NZ_KK228218.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-868-1	NZ_KK223946.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3160-1	NZ_KK229644.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-191-1	NZ_KK221597.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2636-1	NZ_KK224621.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-198-1	NZ_KK221811.1	-	56165	56136	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-212-1	NZ_KK222314.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2690-1	NZ_KK224950.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3065-1	NZ_KK226453.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2469-1	NZ_KK224385.1	-	55969	55940	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2627-1	NZ_KK224533.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-118-1	NZ_KK219075.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-87-1	NZ_KK218139.1	-	55553	55524	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-262-1	NZ_KK222984.1	-	56438	56409	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3109-1	NZ_KK228029.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3122-1	NZ_KK228451.1	-	53737	53708	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-80-1	NZ_KK218041.1	-	54768	54739	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3175-1	NZ_KK230124.1	-	56354	56325	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-84-1	NZ_KK218077.1	-	56261	56232	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-880-1	NZ_KK224318.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-89-1	NZ_KK218219.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3077-1	NZ_KK226834.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-90-1	NZ_KK218244.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3083-1	NZ_KK227076.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-113-1	NZ_KK218892.1	-	54808	54779	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3088-1	NZ_KK227288.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-119-1	NZ_KK219116.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3116-1	NZ_KK228289.1	-	18618	18589	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-124-1	NZ_KK219338.1	-	56310	56281	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3123-1	NZ_KK228505.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3130-1	NZ_KK228701.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3157-1	NZ_KK229539.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3162-1	NZ_KK229729.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3093-1	NZ_KK227448.1	-	56353	56324	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-140-1	NZ_KK219813.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2824-1	NZ_KK225802.1	-	56165	56136	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3060-1	NZ_KK226308.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3153-1	NZ_KK229332.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3154-1	NZ_KK229377.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3165-1	NZ_KK229754.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3183-1	NZ_KK230455.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-182-1	NZ_KK221300.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-265-1	NZ_KK223082.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-870-1	NZ_KK224019.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-103-1	NZ_KK218519.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3010-1	NZ_KK226052.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-108-1	NZ_KK218685.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3017-1	NZ_KK226235.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3119-1	NZ_KK228363.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3132-1	NZ_KK228781.1	-	57286	57257	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3147-1	NZ_KK229226.1	-	56354	56325	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3179-1	NZ_KK230245.1	-	26023	25994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3097-1	NZ_KK227565.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-110-1	NZ_KK218762.1	-	54882	54853	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-116-1	NZ_KK219000.1	-	54756	54727	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-121-1	NZ_KK219204.1	-	43868	43839	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-105-1	NZ_KK218599.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3312-1	NZ_KK235067.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3320-1	NZ_KK235290.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3321-1	NZ_KK23519.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3328-1	NZ_KK235526.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3332-1	NZ_KK235680.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3333-1	NZ_KK235727.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3338-1	NZ_KK235952.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3379-1	NZ_KK237259.1	-	54480	54451	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3384-1	NZ_KK237467.1	-	56317	56288	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3390-1	NZ_KK237651.1	-	54281	54252	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3399-1	NZ_KK237828.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3405-1	NZ_KK238039.1	-	53570	53541	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3410-1	NZ_KK238232.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3417-1	NZ_KK238513.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3422-1	NZ_KK238712.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3423-1	NZ_KK238762.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3427-1	NZ_KK238898.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3428-1	NZ_KK238957.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3372-1	NZ_KK236944.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3373-1	NZ_KK236999.1	-	29618	29589	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3378-1	NZ_KK237210.1	-	53941	53912	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3383-1	NZ_KK237441.1	-	56279	56250	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3389-1	NZ_KK237594.1	-	56353	56324	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3398-1	NZ_KK237796.1	-	26332	26303	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3404-1	NZ_KK237995.1	-	54477	54448	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3409-1	NZ_KK238213.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3415-1	NZ_KK238417.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3431-1	NZ_KK239111.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3432-1	NZ_KK239165.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3421-1	NZ_KK238654.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3426-1	NZ_KK238862.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3376-1	NZ_KK237117.1	-	54536	54507	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3377-1	NZ_KK237165.1	-	54481	54452	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3382-1	NZ_KK237395.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3387-1	NZ_KK237537.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3388-1	NZ_KK237569.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3396-1	NZ_KK237741.1	-	2607	2578	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3397-1	NZ_KK237767.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3403-1	NZ_KK237967.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3408-1	NZ_KK238161.1	-	56394	56365	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3413-1	NZ_KK238364.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3430-1	NZ_KK239060.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3420-1	NZ_KK238600.1	-	55512	55483	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3425-1	NZ_KK238827.1	-	26025	25996	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3393-1	NZ_KK237699.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3401-1	NZ_KK237884.1	-	19182	19153	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3402-1	NZ_KK237920.1	-	56438	56409	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3406-1	NZ_KK238084.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3407-1	NZ_KK238117.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3411-1	NZ_KK238270.1	-	25968	25939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3412-1	NZ_KK238306.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3418-1	NZ_KK238556.1	-	17345	17316	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3424-1	NZ_KK238790.1	-	26025	25996	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3429-1	NZ_KK239008.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3337-1	NZ_KK235896.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3341-1	NZ_KK236088.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3362-1	NZ_KK236638.1	-	54582	54553	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3434-1	NZ_KK239222.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3439-1	NZ_KK239416.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3445-1	NZ_KK239632.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3458-1	NZ_KK240009.1	-	25997	25968	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3464-1	NZ_KK240210.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3284-1	NZ_KK233856.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3470-1	NZ_KK240383.1	-	56384	56355	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3477-1	NZ_KK240551.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3715-1	NZ_KK240724.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3437-1	NZ_KK239359.1	-	26027	25998	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3438-1	NZ_KK239396.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3443-1	NZ_KK239562.1	-	5833	5804	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3444-1	NZ_KK239596.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3450-1	NZ_KK239796.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3456-1	NZ_KK239979.1	-	25389	25360	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3225-1	NZ_KK231905.1	-	56309	56280	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3469-1	NZ_KK240355.1	-	56384	56355	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3266-1	NZ_KK233355.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3476-1	NZ_KK240520.1	-	26332	26303	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3323-1	NZ_KK235408.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3714-1	NZ_KK240688.1	-	56441	56412	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3719-1	NZ_KK240874.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3330-1	NZ_KK235606.1	-	25733	25704	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3353-1	NZ_KK236370.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3365-1	NZ_KK236756.1	-	54478	54449	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3366-1	NZ_KK236796.1	-	54582	54553	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3436-1	NZ_KK239317.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3442-1	NZ_KK239489.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3448-1	NZ_KK239707.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-597-1	NZ_KI966209.1	-	59482	59453	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3449-1	NZ_KK239758.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3453-1	NZ_KK239901.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3288-1	NZ_KK234034.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3454-1	NZ_KK239942.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3460-1	NZ_KK240086.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3461-1	NZ_KK240125.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3467-1	NZ_KK240284.1	-	56403	56374	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3468-1	NZ_KK240323.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3475-1	NZ_KK240494.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3712-1	NZ_KK240655.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3718-1	NZ_KK240836.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3440-1	NZ_KK239446.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3447-1	NZ_KK239680.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3223-1	NZ_KK231839.1	-	55801	55772	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3452-1	NZ_KK239862.1	-	56310	56281	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3291-1	NZ_KK234207.1	-	33041	33012	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3459-1	NZ_KK240053.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3472-1	NZ_KK240411.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3296-1	NZ_KK234444.1	-	56354	56325	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3474-1	NZ_KK240451.1	-	26059	26030	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3313-1	NZ_KK235112.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3478-1	NZ_KK240580.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3322-1	NZ_KK235373.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3246-1	NZ_KK232545.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3344-1	NZ_KK236227.1	-	324	295	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3710-1	NZ_KK240619.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3349-1	NZ_KK236311.1	-	56305	56276	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3247-1	NZ_KK232579.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3716-1	NZ_KK240757.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3717-1	NZ_KK240801.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3357-1	NZ_KK236523.1	-	19385	19356	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3251-1	NZ_KK232759.1	-	25789	25760	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3364-1	NZ_KK236725.1	-	2562	2533	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3252-1	NZ_KK232802.1	-	26023	25994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3257-1	NZ_KK233004.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3258-1	NZ_KK233060.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3264-1	NZ_KK233293.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3269-1	NZ_KK233491.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3301-1	NZ_KK234667.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3278-1	NZ_KK233668.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3347-1	NZ_KK236266.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3285-1	NZ_KK233916.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3356-1	NZ_KK236493.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3243-1	NZ_KK232425.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3369-1	NZ_KK236870.1	-	18726	18697	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3248-1	NZ_KK232626.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3375-1	NZ_KK237079.1	-	56389	56360	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3259-1	NZ_KK233125.1	-	3349	3320	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3380-1	NZ_KK237308.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3265-1	NZ_KK233320.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3385-1	NZ_KK237500.1	-	56354	56325	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3272-1	NZ_KK233526.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3315-1	NZ_KK235151.1	-	26023	25994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3302-1	NZ_KK234707.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3329-1	NZ_KK235571.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3303-1	NZ_KK234760.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3334-1	NZ_KK235765.1	-	56310	56281	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3307-1	NZ_KK234915.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3339-1	NZ_KK235994.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3308-1	NZ_KK234944.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3371-1	NZ_KK236898.1	-	2481	2452	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3290-1	NZ_KK234154.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3280-1	NZ_KK233714.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3381-1	NZ_KK237351.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3295-1	NZ_KK234384.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3286-1	NZ_KK233953.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3306-1	NZ_KK234874.1	-	56440	56411	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3245-1	NZ_KK232506.1	-	54852	54823	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3319-1	NZ_KK235253.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3325-1	NZ_KK235486.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3250-1	NZ_KK232698.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3324-1	NZ_KK235447.1	-	25968	25939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3343-1	NZ_KK236171.1	-	25968	25939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3331-1	NZ_KK235649.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3256-1	NZ_KK232949.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3336-1	NZ_KK235845.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3363-1	NZ_KK236694.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3262-1	NZ_KK233186.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3342-1	NZ_KK236132.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3345-1	NZ_KK328125.1	-	25997	25968	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3263-1	NZ_KK233245.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3354-1	NZ_KK236396.1	-	56390	56361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3267-1	NZ_KK233392.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3355-1	NZ_KK236455.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3268-1	NZ_KK233439.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3368-1	NZ_KK236834.1	-	56279	56250	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3275-1	NZ_KK233602.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3374-1	NZ_KK237046.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3277-1	NZ_KK233637.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3317-1	NZ_KK235201.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3294-1	NZ_KK234337.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3300-1	NZ_KK234614.1	-	53444	53415	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3340-1	NZ_KK236040.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3305-1	NZ_KK234843.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3311-1	NZ_KK235031.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3359-1	NZ_KK236567.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3282-1	NZ_KK233806.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3360-1	NZ_KK236596.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3289-1	NZ_KK234091.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3244-1	NZ_KK232479.1	-	26023	25994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3249-1	NZ_KK232671.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3255-1	NZ_KK232899.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3260-1	NZ_KK233161.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3274-1	NZ_KK233565.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3292-1	NZ_KK234244.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3293-1	NZ_KK234279.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3297-1	NZ_KK234517.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3298-1	NZ_KK234558.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3304-1	NZ_KK234801.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3310-1	NZ_KK234978.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3281-1	NZ_KK233762.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3287-1	NZ_KK233998.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3180-1	NZ_KK230294.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3181-1	NZ_KK230346.1	-	29589	29560	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3202-1	NZ_KK230956.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-867-1	NZ_KK223898.1	-	56351	56322	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3207-1	NZ_KK231188.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3212-1	NZ_KK231386.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2687-1	NZ_KK224793.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4013-1	NZ_AGRP01000086.1	-	54853	54824	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4015-1	NZ_AFTQ01000078.1	-	55162	55133	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3217-1	NZ_KK231605.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3222-1	NZ_KK231797.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3104-1	NZ_KK227826.1	-	26023	25994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3227-1	NZ_KK231957.1	-	56309	56280	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3128-1	NZ_KK228659.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3233-1	NZ_KK232123.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3240-1	NZ_KK232321.1	-	53699	53670	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3134-1	NZ_KK228852.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3186-1	NZ_KK230550.1	-	56420	56391	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3141-1	NZ_KK229051.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3187-1	NZ_KK230593.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3195-1	NZ_KK230781.1	-	56304	56275	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3151-1	NZ_KK229266.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3182-1	NZ_KK230400.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3203-1	NZ_KK231012.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3155-1	NZ_KK229434.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3208-1	NZ_KK231221.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3213-1	NZ_KK231435.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3167-1	NZ_KK229842.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3218-1	NZ_KK231633.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3174-1	NZ_KK230081.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3228-1	NZ_KK231982.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3230-1	NZ_KK232006.1	-	56353	56324	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3235-1	NZ_KK232151.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3236-1	NZ_KK232180.1	-	26025	25996	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3241-1	NZ_KK232371.1	-	56394	56365	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-203-1	NZ_KK222014.1	-	34754	34725	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3188-1	NZ_KK230635.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3196-1	NZ_KK230828.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3105-1	NZ_KK227870.1	-	26023	25994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3185-1	NZ_KK230491.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3110-1	NZ_KK228070.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3200-1	NZ_KK230930.1	-	53254	53225	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3205-1	NZ_KK231074.1	-	26287	26258	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3135-1	NZ_KK228890.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3206-1	NZ_KK231155.1	-	56394	56365	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3210-1	NZ_KK231317.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3156-1	NZ_KK229493.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3211-1	NZ_KK231348.1	-	25968	25939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3216-1	NZ_KK231552.1	-	9739	9710	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3161-1	NZ_KK229686.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3221-1	NZ_KK231752.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3226-1	NZ_KK231934.1	-	54426	54397	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3169-1	NZ_KK229903.1	-	56339	56310	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3232-1	NZ_KK232090.1	-	324	295	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3239-1	NZ_KK232282.1	-	56310	56281	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3170-1	NZ_KK229956.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3191-1	NZ_KK230709.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3194-1	NZ_KK230757.1	-	56310	56281	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3177-1	NZ_KK230171.1	-	26023	25994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3199-1	NZ_KK230896.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3204-1	NZ_KK231053.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3209-1	NZ_KK231265.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3214-1	NZ_KK231470.1	-	26149	26120	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3215-1	NZ_KK231503.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3219-1	NZ_KK231663.1	-	53737	53708	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3220-1	NZ_KK231710.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3224-1	NZ_KK231877.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3231-1	NZ_KK232044.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3238-1	NZ_KK232221.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3100-1	NZ_KK227661.1	-	57233	57204	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3189-1	NZ_KK230662.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3197-1	NZ_KK230870.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3074-1	NZ_KK226711.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3107-1	NZ_KK227954.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3113-1	NZ_KK228153.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3125-1	NZ_KK228588.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3127-1	NZ_KK228618.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3133-1	NZ_KK228823.1	-	56380	56351	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3159-1	NZ_KK229612.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3172-1	NZ_KK230044.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2635-1	NZ_KK224580.1	-	31457	31428	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2696-1	NZ_KK225209.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2728-1	NZ_KK225630.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3008-1	NZ_KK225971.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3015-1	NZ_KK226169.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3072-1	NZ_KK226639.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3078-1	NZ_KK226872.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3137-1	NZ_KK228988.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3146-1	NZ_KK229172.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3158-1	NZ_KK229579.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3171-1	NZ_KK229998.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3178-1	NZ_KK230206.1	-	56440	56411	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3102-1	NZ_KK227736.1	-	56395	56366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3416-1	NZ_KK238465.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3451-1	NZ_KK239825.1	-	56352	56323	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-366-1	NZ_KK099382.1	-	57558	57529	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-384-1	NZ_KK098824.1	-	58224	58195	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1071-1	NZ_KK097754.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-994-1	NZ_KK096328.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3435-1	NZ_KK239279.1	-	56439	56410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3465-1	NZ_KK240248.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2705-1	NZ_KK093341.1	-	25162	25133	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3254-1	NZ_KK232846.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3560-1	NZ_KK097381.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3335-1	NZ_KK235791.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-323-1	NZ_KK099083.1	-	423928	423899	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3462-1	NZ_KK240163.1	-	26024	25995	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2908-1	NZ_KK095057.1	-	34913	34884	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-433-1	NZ_KK097952.1	-	402019	401990	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-476-1	NZ_KK098504.1	-	56762	56733	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-578-1	NZ_KK099895.1	-	64875	64846	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3535-1	NZ_KK097153.1	-	34913	34884	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-382-1	NZ_KK099509.1	-	119448	119419	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-420-1	NZ_KK097832.1	-	238441	238412	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-389-1	NZ_KK099568.1	-	59482	59453	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-489-1	NZ_KK098660.1	-	247385	247356	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-326-1	NZ_KK099092.1	-	56763	56734	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-325-1	NZ_KI966037.1	-	60735	60706	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1993-1	NZ_KI972366.1	-	56763	56734	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3052-1	NZ_KI979037.1	-	56994	56965	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3048-1	NZ_KI978310.1	+	30719	30748	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2386-1	NZ_KI997506.1	-	94282	94253	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3643-1	NZ_KK027977.1	-	34874	34845	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2786-1	NZ_KI974346.1	-	238794	238765	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2796-1	NZ_KI976735.1	-	230191	230162	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-627-1	NZ_KK029040.1	-	56891	56862	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2708-1	NZ_KK028975.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-297-1	NZ_KI978058.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2229-1	NZ_KK021866.1	-	92275	92246	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-228-1	NZ_KI974986.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2870-1	NZ_KK031065.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2312-1	NZ_KI994172.1	-	218046	218017	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2707-1	NZ_KK028867.1	-	56893	56864	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3700-1	NZ_KI974015.1	-	108552	108523	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3693-1	NZ_KI978641.1	-	55562	55533	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2439-1	NZ_KI991670.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2565-1	NZ_KK031039.1	-	56891	56862	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-933-1	NZ_KK029598.1	-	34817	34788	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2461-1	NZ_KK025203.1	-	34913	34884	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-716-1	NZ_KK024072.1	-	36850	36821	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-934-1	NZ_KK029661.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2643-1	NZ_KI973965.1	-	113174	113145	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2980-1	NZ_KK026111.1	-	34913	34884	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3582-1	NZ_KK032539.1	-	34872	34843	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2543-1	NZ_KK023131.1	-	122766	122737	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-780-1	NZ_KK028731.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2596-1	NZ_KK038732.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2210-1	NZ_KK063536.1	-	36340	36311	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2203-1	NZ_KK063687.1	-	55327	55298	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-882-1	NZ_KK047892.1	-	1743431	1743402	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2879-1	NZ_KK040438.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2213-1	NZ_KK063477.1	-	61690	61661	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2202-1	NZ_KK063693.1	-	89866	89837	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2202-2	NZ_KK063701.1	-	729	700	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2200-1	NZ_KK063759.1	-	62102	62073	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3524-1	NZ_KK038189.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3570-1	NZ_KK070196.1	-	56763	56734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2197-1	NZ_KK063823.1	-	49861	49832	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1038-1	NZ_KK023042.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1594-1	NZ_KK015498.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1017-1	NZ_KK030121.1	-	34874	34845	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1808-1	NZ_KI983480.1	-	159047	159018	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2911-1	NZ_KK028256.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1033-1	NZ_KK030215.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2910-1	NZ_KK070146.1	-	2279611	2279582	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1364-1	NZ_KK018792.1	-	54650	54621	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3667-1	NZ_KK039880.1	-	34723	34694	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1136-1	NZ_KI978371.1	-	114662	114633	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1140-1	NZ_KI978955.1	+	28862	28891	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2849-1	NZ_KK040624.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-975-1	NZ_KK027004.1	-	35252	35223	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3644-1	NZ_KK070141.1	-	58499	58470	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2850-1	NZ_KK040575.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1045-1	NZ_KK028163.1	-	56839	56810	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3618-1	NZ_KK040065.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1157-1	NZ_KI977819.1	-	56711	56682	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3546-1	NZ_KK070463.1	-	233759	233730	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1900-1	NZ_KI986469.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3566-1	NZ_KK070522.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1046-1	NZ_KK028120.1	-	56840	56811	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2932-1	NZ_KK070434.1	-	1317508	1317479	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1506-1	NZ_KK011654.1	-	29343	29314	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3589-1	NZ_KK070796.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1144-1	NZ_KI979048.1	+	28862	28891	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1425-1	NZ_KK008095.1	-	16412	16383	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2089-1	NZ_KK067715.1	-	35432	35403	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1903-1	NZ_KI986668.1	-	61890	61861	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1515-1	NZ_KK011935.1	-	28890	28861	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2070-1	NZ_KK068525.1	-	25129	25100	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2137-1	NZ_KK066290.1	-	100337	100308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1971-1	NZ_KI988985.1	-	35965	35936	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2133-1	NZ_KK066410.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2222-1	NZ_KK063117.1	-	113837	113808	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2014-1	NZ_KI990584.1	-	97672	97643	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2015-1	NZ_KI990591.1	-	35811	35782	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2184-1	NZ_KK064370.1	-	238606	238577	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-954-1	NZ_KK028703.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-779-1	NZ_KK070244.1	-	1717691	1717662	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-953-1	NZ_KK028665.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2178-1	NZ_KK064644.1	-	39446	39417	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1537-1	NZ_KK012963.1	-	28970	28941	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2116-1	NZ_KK067026.1	-	190797	190768	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2096-1	NZ_KI972794.1	-	132173	132144	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-946-1	NZ_KK070928.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2113-1	NZ_KI972829.1	-	1690075	1690046	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-912-1	NZ_KK070406.1	-	60273	60244	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2148-1	NZ_KK065750.1	-	14631	14602	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-964-1	NZ_KK070258.1	-	2212058	2212029	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1276-1	NZ_KK002718.1	-	2467	2438	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2153-1	NZ_KK065535.1	-	35318	35289	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2177-1	NZ_KK064649.1	+	92353	92382	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2046-1	NZ_KK069412.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2168-1	NZ_KK064917.1	-	35170	35141	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2195-1	NZ_KK063955.1	-	65032	65003	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-927-1	NZ_KK070415.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2155-1	NZ_KK065442.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2180-1	NZ_KK064502.1	-	54695	54666	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2104-1	NZ_KI972810.1	-	272641	272612	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2173-1	NZ_KK064758.1	-	35655	35626	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2182-1	NZ_KK064385.1	-	36390	36361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2142-1	NZ_KK065987.1	-	36390	36361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2165-1	NZ_KK065079.1	-	56863	56834	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2054-1	NZ_KK069179.1	-	111617	111588	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2053-1	NZ_KK069187.1	-	62157	62128	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2068-1	NZ_KK068648.1	-	29575	29546	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2027-1	NZ_KI972421.1	-	58040	58011	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2473-1	NZ_KK070688.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2102-1	NZ_KK067436.1	-	440	411	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2129-1	NZ_KK066608.1	-	215967	215938	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2131-1	NZ_KK066564.1	-	111834	111805	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2126-1	NZ_KK066755.1	-	54695	54666	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2119-1	NZ_KK066925.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1009-1	NZ_KK041351.1	-	34912	34883	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2186-1	NZ_KK064262.1	-	36340	36311	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2091-1	NZ_KK067619.1	-	43771	43742	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2074-1	NZ_KK068353.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2086-1	NZ_KK067890.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2192-1	NZ_KK064013.1	-	35704	35675	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2063-1	NZ_KK068829.1	-	35670	35641	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-713-1	NZ_KK070332.1	-	60061	60032	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2145-1	NZ_KK065895.1	-	62202	62173	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2035-1	NZ_KK069868.1	-	35148	35119	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2150-1	NZ_KK065628.1	-	61380	61351	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-943-1	NZ_KK070851.1	-	34873	34844	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2112-1	NZ_KK067126.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2043-1	NZ_KK069655.1	-	110269	110240	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2107-1	NZ_KK067213.1	-	36391	36362	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1023-1	NZ_KK041205.1	-	34913	34884	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-984-1	NZ_KK041433.1	-	56986	56957	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2189-1	NZ_KK064216.1	-	101158	101129	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2162-1	NZ_KK065224.1	-	36491	36462	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2144-1	NZ_KK065899.1	-	54697	54668	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2139-1	NZ_KK066119.1	-	35307	35278	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1063-1	NZ_KK070162.1	-	61782	61753	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-903-1	NZ_KK070387.1	-	1675784	1675755	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2157-1	NZ_KK065402.1	-	35959	35930	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2082-1	NZ_KK068024.1	-	62005	61976	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2151-1	NZ_KK065582.1	-	35786	35757	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-700-1	NZ_KK070274.1	-	1613796	1613767	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2045-1	NZ_KK069459.1	-	35844	35815	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2169-1	NZ_KK064864.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2140-1	NZ_KK066058.1	-	10628	10599	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-680-1	NZ_KK070046.1	-	57065	57036	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2100-1	NZ_KK067537.1	-	11745	11716	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-736-1	NZ_KK070488.1	-	34988	34959	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2172-1	NZ_KK070074.1	-	62003	61974	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-702-1	NZ_KK070315.1	-	60739	60710	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2036-1	NZ_KK069801.1	-	36390	36361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-738-1	NZ_KK070550.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2159-1	NZ_KK065320.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2061-1	NZ_KK068950.1	-	36391	36362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-768-1	NZ_KK070248.1	-	1659107	1659078	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-730-1	NZ_KK039465.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-758-1	NZ_KK070953.1	-	56991	56962	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-721-1	NZ_KK070384.1	-	61506	61477	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-718-1	NZ_KK039541.1	-	36294	36265	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-663-1	NZ_KK070269.1	-	1624827	1624798	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2482-1	NZ_KK071089.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2039-1	NZ_KK069750.1	-	31193	31164	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2191-1	NZ_KK064074.1	-	54917	54888	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2190-1	NZ_KK064116.1	-	59845	59816	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2472-1	NZ_KK070711.1	-	56892	56863	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2979-1	NZ_KK071027.1	-	56993	56964	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-748-1	NZ_KK070598.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-737-1	NZ_KK070534.1	-	56790	56761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2078-1	NZ_KK068249.1	-	62156	62127	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-830-1	NZ_KK072816.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2123-1	NZ_KK066844.1	-	52141	52112	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2486-1	NZ_KK071243.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3003-1	NZ_KK071918.1	-	55194	55165	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2501-1	NZ_KK070232.1	-	1675361	1675332	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-956-1	NZ_KK071309.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3609-1	NZ_KK071940.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-798-1	NZ_KK072206.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2838-1	NZ_KK073322.1	-	34973	34944	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2478-1	NZ_KK070966.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-971-1	NZ_KK071827.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2490-1	NZ_KK071516.1	-	55217	55188	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2856-1	NZ_KK073413.1	-	54968	54939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-807-1	NZ_KK072576.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3505-1	NZ_KK070053.1	-	1681745	1681716	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-811-1	NZ_KK072713.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-992-1	NZ_KK072419.1	-	54895	54866	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1011-1	NZ_KK073025.1	-	58371	58342	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3617-1	NZ_KK073538.1	-	19183	19154	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1056-1	NZ_KK073074.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2524-1	NZ_KK073170.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3605-1	NZ_KK071587.1	-	56790	56761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-999-1	NZ_KK072994.1	-	55000	54971	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2528-1	NZ_KK073191.1	-	55116	55087	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2134-1	NZ_KK066353.1	-	54695	54666	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-989-1	NZ_KK072905.1	-	56645	56616	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3646-1	NZ_KK073630.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-982-1	NZ_KK072140.1	-	34872	34843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3616-1	NZ_KK072352.1	-	54968	54939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2995-1	NZ_KK071742.1	-	29186	29157	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-750-1	NZ_KK070624.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3608-1	NZ_KK072054.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2512-1	NZ_KK072288.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3628-1	NZ_KK073585.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2530-1	NZ_KK073263.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3614-1	NZ_KK073511.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-822-1	NZ_KK072745.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2888-1	NZ_KK073475.1	-	2229157	2229128	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3632-1	NZ_KK073602.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2874-1	NZ_KK073433.1	-	35013	34984	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2522-1	NZ_KK073121.1	-	55150	55121	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3657-1	NZ_KK073725.1	-	35266	35237	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-766-1	NZ_KK071427.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-832-1	NZ_KK072828.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1057-1	NZ_KK073082.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2865-1	NZ_KK073426.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3486-1	NZ_KK073499.1	-	55180	55151	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2551-1	NZ_KK073287.1	-	25259	25230	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-773-1	NZ_KK071626.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3647-1	NZ_KK073682.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2452-1	NZ_KK075555.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-622-1	NZ_KK072501.1	-	34972	34943	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3557-1	NZ_KK074598.1	-	54895	54866	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2875-1	NZ_KK075183.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1078-1	NZ_KK075649.1	-	56545	56516	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3654-1	NZ_KK074429.1	-	55082	55053	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3653-1	NZ_KK074489.1	-	54955	54926	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2576-1	NZ_KK075313.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1050-1	NZ_KK075688.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2589-1	NZ_KK075278.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2571-1	NZ_KK075413.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2552-1	NZ_KK075464.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3490-1	NZ_KK074798.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3488-1	NZ_KK074916.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3521-1	NZ_KK074673.1	-	55184	55155	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1029-1	NZ_KK075843.1	-	56993	56964	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1031-1	NZ_KK075811.1	-	56892	56863	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1030-1	NZ_KK075827.1	-	55165	55136	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3481-1	NZ_KK075042.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3487-1	NZ_KK074958.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2928-1	NZ_KK075123.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2590-1	NZ_KK075264.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-937-1	NZ_KK075909.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-939-1	NZ_KK075889.1	-	56794	56765	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-668-1	NZ_KK076136.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-670-1	NZ_KK076076.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-634-1	NZ_KK076386.1	-	34817	34788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-642-1	NZ_KK076331.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-921-1	NZ_KK075946.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-559-1	NZ_KK074307.1	-	35225	35196	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3500-1	NZ_KK074734.1	-	34862	34833	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2561-1	NZ_KK075418.1	-	55143	55114	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2929-1	NZ_KK075070.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2494-1	NZ_KK075544.1	-	55129	55100	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-653-1	NZ_KK076162.1	-	55117	55088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3516-1	NZ_KK074684.1	-	18844	18815	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3948-1	NZ_KB822121.1	-	61693	61664	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3846-1	NZ_KB821353.1	-	423199	423170	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3978-1	NZ_KB822284.1	-	61557	61528	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-46-1	NC_017338.1	-	2183672	2183643	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-42-1	NZ_GG730345.1	-	54966	54937	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-753-1	NZ_KK075956.1	-	56988	56959	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-53-1	NZ_CM000952.1	+	1580336	1580365	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-36-1	NZ_GG730180.1	-	55039	55010	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-65-1	NC_017347.1	-	2231645	2231616	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-39-1	NC_017337.1	-	2207066	2207037	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-22-1	NC_017351.1	-	2218864	2218835	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-72-1	NC_016912.1	-	2054189	2054160	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3722-5	NZ_CP012120.1	+	1585676	1585705	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-27-1	NC_017673.1	-	2081692	2081663	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2-1	NC_018608.1	-	2149095	2149066	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3844-1	NZ_KB821340.1	-	240089	240060	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3823-1	NZ_KB821215.1	-	1776670	1776641	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3851-1	NZ_KB821359.1	-	1730139	1730110	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3920-1	NZ_KB821944.1	-	59999	59970	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3787-1	NZ_KB820976.1	-	2184946	2184917	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3873-1	NZ_KB821509.1	-	242380	242351	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3908-1	NZ_KB821832.1	-	56781	56752	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3829-1	NZ_KB821242.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3890-1	NZ_KB821688.1	-	1733325	1733296	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3899-1	NZ_KB821782.1	-	56963	56934	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3907-1	NC_021059.1	-	2228162	2228133	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4103-1	NC_020566.1	-	2120659	2120630	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-4103-2	NC_020533.1	-	2121038	2121009	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-4103-3	NC_020568.1	-	2120524	2120495	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-38-1	NC_017343.1	-	2100233	2100204	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3764-1	NC_021670.1	-	2323309	2323280	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3765-1	NC_021554.1	-	2228321	2228292	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4037-1	NC_022113.1	-	2130139	2130110	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4073-1	NC_022226.1	-	2123384	2123355	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4101-1	NC_022443.1	-	2079264	2079235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4102-1	NC_022442.1	-	2140502	2140473	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4099-1	NZ_KI542650.1	-	54850	54821	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3722-1	NZ_CP009681.1	-	2385668	2385639	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2348-1	NZ_KI995558.1	-	94306	94277	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-221-1	NZ_KN716005.1	-	83047	83018	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-69-1	NC_007793.1	-	2235973	2235944	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-70-1	NC_010079.1	-	2236367	2236338	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-68-1	NC_017331.1	-	2388545	2388516	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-71-1	NZ_GG697988.1	+	54821	54850	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4120-1	NC_022604.1	-	2332120	2332091	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-719-1	NZ_KK070335.1	-	2250080	2250051	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3682-1	NZ_KI978453.1	-	54812	54783	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-674-1	NZ_KK039802.1	-	54900	54871	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3055-1	NZ_KI979115.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2758-1	NZ_KI973663.1	-	56625	56596	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-845-1	NZ_KI974683.1	-	56626	56597	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1147-1	NZ_KI975430.1	-	56660	56631	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3024-1	NZ_KI976149.1	-	60297	60268	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2755-1	NZ_KI973439.1	-	60262	60233	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1439-1	NZ_KK008820.1	-	54837	54808	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1139-1	NZ_KI979287.1	-	56523	56494	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3722-2	NZ_CP009554.1	-	2260619	2260590	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1667-1	NZ_KI966968.1	-	54889	54860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1688-1	NZ_KI967791.1	-	55129	55100	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2243-1	NZ_KI972937.1	-	1063329	1063300	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1264-1	NZ_KI971916.1	-	237016	236987	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1450-1	NZ_KI971554.1	-	1106971	1106942	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1685-1	NZ_KI967653.1	-	55327	55298	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1177-1	NZ_KI971760.1	-	57191	57162	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2193-1	NZ_KI972880.1	-	56529	56500	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1660-1	NZ_KI966712.1	-	55956	55927	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1566-1	NZ_KI971107.1	-	1157441	1157412	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2905-1	NZ_KK038542.1	-	56893	56864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1576-1	NZ_KI971132.1	-	56529	56500	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1223-1	NZ_KI971849.1	-	60286	60257	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1678-1	NZ_KI967412.1	-	56005	55976	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-862-1	NZ_KI978748.1	-	792665	792636	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1246-1	NZ_KI971881.1	-	1655839	1655810	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2163-1	NZ_KK065158.1	-	55513	55484	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1153-1	NZ_KI974632.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1736-1	NZ_KI970390.1	-	60042	60013	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1737-1	NZ_KI970462.1	-	55043	55014	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3629-1	NZ_KK073589.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3669-1	NZ_KI973764.1	-	56993	56964	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2648-1	NZ_KI974486.1	-	56892	56863	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1100-1	NZ_KK047877.1	-	55212	55183	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2103-1	NZ_KI972799.1	-	160062	160033	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1835-1	NZ_KI984554.1	-	55326	55297	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1213-1	NZ_KI971833.1	-	56529	56500	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1529-1	NZ_KK012683.1	-	55280	55251	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-789-1	NZ_KK070096.1	-	237242	237213	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1793-1	NZ_KI982734.1	-	55094	55065	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1607-1	NZ_KK016117.1	-	54989	54960	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3513-1	NZ_KK023462.1	-	56940	56911	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1169-1	NZ_KI976235.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1160-1	NZ_KI978692.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1397-1	NZ_KI971474.1	-	56724	56695	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-926-1	NZ_KK024977.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1112-1	NZ_KI974788.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1096-1	NZ_KK047666.1	-	56405	56376	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-2030-1	NZ_KI991135.1	-	54894	54865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3056-1	NZ_CP007176.1	-	2285144	2285115	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3757-1	NZ_CP010526.1	-	2229272	2229243	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2619-1	NZ_KI976828.1	-	56994	56965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1260-1	NZ_KK002230.1	-	55140	55111	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1588-1	NZ_KK015179.1	-	55189	55160	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1615-1	NZ_KK016620.1	-	54989	54960	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2220-1	NZ_KK063185.1	-	55259	55230	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1870-1	NZ_KI985398.1	-	55233	55204	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1997-1	NZ_KI989969.1	-	54889	54860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2056-1	NZ_KK069096.1	-	55426	55397	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3522-1	NZ_KK070456.1	-	279710	279681	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2196-1	NZ_KK063830.1	-	55189	55160	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1451-1	NZ_KK009269.1	-	54889	54860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2655-1	NZ_KK019219.1	-	792664	792635	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1257-1	NZ_KK002069.1	-	55131	55102	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2912-1	NZ_KK020889.1	-	41304	41275	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1127-1	NZ_KI975919.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1239-1	NZ_KK001294.1	-	55148	55119	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1274-1	NZ_KK002623.1	-	55426	55397	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1794-1	NZ_KI982815.1	-	55130	55101	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1885-1	NZ_KI985844.1	-	55424	55395	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1262-1	NZ_KK002316.1	-	55407	55378	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1528-1	NZ_KK012556.1	-	55135	55106	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1609-1	NZ_KK016307.1	-	55043	55014	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-776-1	NZ_KK026432.1	-	29424	29395	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2604-1	NZ_KI973827.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1328-1	NZ_KK005051.1	-	55231	55202	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1531-1	NZ_KK012699.1	-	55135	55106	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1181-1	NZ_KI998921.1	-	54889	54860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1627-1	NZ_KK017224.1	-	54989	54960	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-930-1	NZ_KK025367.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2075-1	NZ_KK068270.1	-	55231	55202	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2164-1	NZ_KK065099.1	-	25205	25176	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2775-1	NZ_KI975292.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1869-1	NZ_KI985316.1	-	55331	55302	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1259-1	NZ_KK002154.1	-	55231	55202	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1643-1	NZ_KK018033.1	-	60065	60036	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1606-1	NZ_KK016041.1	-	55331	55302	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1818-1	NZ_KI983816.1	-	27093	27064	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1256-1	NZ_KK001992.1	-	55372	55343	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2170-1	NZ_KK064806.1	-	55454	55425	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1253-1	NZ_KK001790.1	-	55131	55102	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2049-1	NZ_KK069306.1	-	54994	54965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2539-1	NZ_KK096734.1	-	34913	34884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2477-1	NZ_KK092636.1	-	56894	56865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3630-1	NZ_KK097480.1	-	57198	57169	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-643-1	NZ_KK076265.1	-	34873	34844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-328-1	NZ_KK099102.1	-	348428	348399	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-333-1	NZ_KK099145.1	+	57760	57789	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-376-1	NZ_KK099464.1	-	350084	350055	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-156-1	NZ_KK220355.1	-	26024	25995	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Sau-3722-3	NZ_CP007659.1	-	2212795	2212766	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3755-1	NZ_CP006630.1	-	2169570	2169541	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3756-1	NZ_KL662263.1	-	54767	54738	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3722-4	NZ_CP009361.1	-	2152383	2152354	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-79-1	NZ_LN626917.1	-	2210527	2210498	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4103-4	NC_020529.1	-	2120722	2120693	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-4103-5	NC_020564.1	-	2120709	2120680	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-4103-6	NC_020536.1	-	2120708	2120679	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-4103-7	NC_020537.1	-	2120471	2120442	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-4103-8	NC_020532.1	-	2121018	2120989	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)
Sau-218-1	NZ_KK240911.1	+	56430	56459	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3939-1	NZ_KB822069.1	-	1303682	1303653	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-79-2	NZ_CP007539.1	-	2184540	2184511	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1-1	NC_017340.1	-	2190574	2190545	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3722-6	NZ_CP012119.1	+	2562238	2562267	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3743-1	NZ_CP011526.1	-	2117394	2117365	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4094-1	NZ_JH691956.1	-	1623707	1623678	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1162-1	NZ_KE503211.1	+	1132666	1132695	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4075-1	NZ_AJKF01000031.1	-	3066	3037	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4106-1	NZ_AGTZ01000005.1	+	28862	28891	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4085-1	NZ_AICI01000200.1	-	15991	15962	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4089-1	NZ_AHLP01000002.1	-	55170	55141	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4061-1	NZ_AHVN01000011.1	-	57147	57118	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4090-1	NZ_AHLQ01000001.1	-	25176	25147	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4063-1	NZ_AHVV01000014.1	-	59240	59211	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4081-1	NZ_AHLR01000057.1	-	54627	54598	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4082-1	NZ_AHLS01000123.1	-	9926	9897	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4045-1	NZ_AHKD01000013.1	-	59992	59963	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4086-1	NZ_AHLM01000010.1	-	55240	55211	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4006-1	NZ_AFEG01000024.1	-	54491	54462	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4091-1	NZ_AJLD01000001.1	-	35341	35312	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3749-1	NZ_CAWB010000325.1	+	6522	6551	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3694-1	NZ_JBFR01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3747-1	NZ_CAVH010000032.1	-	25734	25705	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-1122-1	NZ_JBJK01000006.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2783-1	NZ_JBNJ01000001.1	-	1322998	1322969	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3752-1	NZ_CAWA010000012.1	+	48028	48057	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2761-1	NZ_JBLV01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3754-1	NZ_CAVW010000042.1	+	18308	18337	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3753-1	NZ_CAVV010000049.1	-	15697	15668	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3748-1	NZ_CAVX010000008.1	-	25736	25707	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3750-1	NZ_CAVY010000101.1	-	20464	20435	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3751-1	NZ_CAVU010000011.1	+	48082	48111	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2547-1	NZ_JGHQ01000002.1	-	56894	56865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2716-1	NZ_JEMM01000011.1	-	54849	54820	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3734-1	NZ_JHPZ01000040.1	-	54712	54683	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3730-1	NZ_JHPX01000001.1	-	54958	54929	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3724-1	NZ_JHPS01000026.1	-	29607	29578	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4076-1	NZ_JHQG01000095.1	-	503	474	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-3728-1	NZ_JHPV01000038.1	-	56085	56056	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-4077-1	NZ_JHTT01000096.1	-	55218	55189	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-2717-1	NZ_JDRT01000006.1	+	46152	46181	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Oki-1-1	NZ_CM001792.1	-	3174116	3174084	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Oih-1-1	NC_004193.1	-	3108848	3108816	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Pgl-1-1	NZ_KI519435.1	-	42469	42438	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Osp-1-1	NZ_HE610976.1	-	738196	738164	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Oma-1-1	NZ_CCDL01000001.1	+	930544	930575	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bba-4-1	NZ_LAZH01000073.1	+	72597	72628	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sai-1-1	NZ_KE007196.1	-	146719	146687	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Pch-1-1	NZ_AVBG01000002.1	-	81446	81414	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bme-6-1	NZ_KI518593.1	-	65186	65154	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Pli-1-1	NZ_AVPG01000013.1	-	37362	37330	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Opi-1-1	NZ_CCAX010000004.1	-	131537	131506	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsp-83-1	NZ_KI270940.1	+	507592	507624	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Hsp-1-1	NZ_ANPF01000001.1	+	62661	62693	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Hsp-2-1	NZ_JRNX01000108.1	-	3575	3543	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Tde-1-1	NZ_KI543237.1	-	735753	735721	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Htr-1-1	NZ_CCDJ010000001.1	-	775405	775373	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Hda-1-1	NZ_CCDH010000001.1	+	1071371	1071403	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Hka-1-1	NZ_CCDI010000001.1	-	1280886	1280854	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Vsp-1-1	NZ_AUQA01000002.1	-	1068398	1068366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Vma-1-1	NZ_CCDP010000001.1	+	560592	560624	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Vpa-1-1	NZ_LGTO01000005.1	+	626906	626938	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Oco-1-1	NZ_LDPV02000007.1	-	9420	9389	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Psp-6-1	NZ_CBYO010000007.1	-	292529	292498	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Oca-1-1	NZ_LDUE01000021.1	-	69650	69619	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Val-1-1	NZ_JFBD01000064.1	-	10605	10572	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1007	TV14_100008	-	68254	68222	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Gha-2-1	NZ_AFML01000077.1	-	3139	3107	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Pgl-2-1	NZ_LGAF01000018.1	-	43190	43163	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pgl-3-1	NZ_AUYR01000095.1	+	35852	35879	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pma-5-1	NZ_CCXS01000001.1	+	811716	811743	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1008	3300001196_1064895	-	266	236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1009	3300001197_1032424	-	97	67	RNA → hypo →
Sur-1-1	NZ_AUDQ01000005.1	-	34401	34371	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Var-2-1	NZ_LILB01000005.1	-	1317698	1317668	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Var-1-1	NZ_ASQA01000009.1	-	79603	79573	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bce-148-1	NZ_AOFT01000001.1	+	212893	212923	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-1010	topACOD_FV90NF401DKND5	-	503	472	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-1011	2204573945	-	257	227	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1012	2157810416	-	257	227	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1013	MA40A.contig22098	+	215	245	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-77-1	NZ_AP013294.1	+	1455730	1455760	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sko-2-1	NZ_CDGU01000008.1	-	326072	326042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sne-1-1	NZ_GL982997.1	-	1321838	1321808	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1014	3300001196_1006164	-	2809	2779	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1015	JGI24024J18818_10026976	+	2203	2233	RNA → ← hypo
env-1016	JGI24024J18818_10198670	+	28	58	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1017	JGI24024J18818_10035368	-	167	137	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bce-149-1	NZ_CDGP01000041.1	+	2627	2657	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bce-149-2	NZ_CDGP01000042.1	+	2627	2657	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-37-1	NZ_JRGN01000034.1	-	1132	1102	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pan-1-1	NZ_AJYB01000017.1	-	68220	68190	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Psp-38-1	NZ_JHDT01000001.1	-	6165	6135	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pha-3-1	NZ_ANBV01000010.1	+	146734	146764	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-39-1	NZ_CP009129.1	-	2482118	2482088	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pdo-1-1	NZ_AEPB01000064.1	+	9346	9376	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1018	KGI_S2_ANT04_2345m.c1001284	-	9677	9647	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
env-1019	KGI_S2_ANT04_2345m.c1014326	+	879	909	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1020	KGI_S2_ANT05_2345m.c1009878	-	1148	1118	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
env-1021	KGI_S1_ANT02_95m.c10007926	-	333	303	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Uth-1-1	NZ_AJIK01000003.1	-	25693	25662	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
env-1022	JGI24505J29691_1082918	+	38	68	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bnd-1-1	NZ_HG964403.1	+	361882	361912	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Lbo-1-1	NZ_JPVR01000063.1	+	12881	12911	PrfA (COG0216)prfA (PRK00591)→ HemK (COG2890)RF_mod_PrmC (TIGR03534)→ Spore_ILR (pfam01197)→
env-1023	JGI25151J46595_10149639	+	515	545	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lsp-8-1	NZ_KB933398.1	+	1093231	1093261	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lsp-5-1	NZ_JPDM01000191.1	-	6944	6914	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1024	JGI25151J46595_10018623	-	794	764	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bsp-3-1	NZ_AAXV01000038.1	-	28491	28461	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lsp-2-1	NZ_JSZM01000017.1	+	118321	118351	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lfu-3-1	NZ_AYMK01000007.1	-	69241	69211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lsp-5-2	NZ_JMMU01000037.1	+	118169	118199	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lfu-2-1	NZ_JRBA01000001.1	+	118968	118998	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lfu-1-1	NZ_ADJR01000052.1	+	46794	46824	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lfu-4-1	NZ_AMQZ01000018.1	-	70817	70787	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lva-1-1	NZ_CP006837.1	+	564657	564687	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lsp-7-1	NZ_AUOZ01000018.1	+	205124	205154	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1025	JGI25151J46595_10124138	-	251	221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lxy-1-1	NZ_LFXJ01000010.1	+	171030	171060	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lsp-6-1	NZ_KK037167.1	+	1006983	1007013	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lsp-5-3	NZ_JPDJ01000203.1	+	13735	13765	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lsp-5-4	NZ_JPDK01000128.1	+	109979	110009	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lsp-5-5	NZ_JPDL01000110.1	+	13742	13772	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lma-2-1	NZ_JPVQ01000001.1	+	254351	254381	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lsp-4-1	NZ_LDUJ01000035.1	+	13772	13802	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lod-1-1	NZ_JPVP01000053.1	-	366	336	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ssi-1-1	NC_018065.1	-	3510116	3510086	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Bis-1-1	NZ_AMCK01000003.1	-	71858	71828	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lma-1-1	NZ_JPVN01000002.1	-	107895	107865	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Khu-1-1	NZ_AYTB01000002.1	+	218270	218300	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kma-1-1	NZ_HE610996.1	-	681420	681390	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ksp-1-1	NZ_HE578956.1	+	151508	151538	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1026	GBANfinal_FHNL2OP03R1YNQ	-	115	85	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Lsi-1-1	NZ_JPVO01000048.1	+	100905	100935	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ksp-2-1	NZ_HE611064.1	-	867109	867079	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1027	JGI24024J18818_10110073	+	370	400	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1028	JGI24024J18818_10018649	-	700	670	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1029	JGI24024J18818_10129236	-	495	465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1030	JGI24024J18818_10222139	+	165	195	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-34-1	NZ_KE150421.1	-	1801271	1801241	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-35-1	NZ_AMGD01000100.1	+	11731	11761	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-36-1	NZ_ALJG01000332.1	+	26178	26208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
env-1031	JGI24024J18818_10369468	-	280	250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-1032	JGI24024J18818_10113359	-	224	194	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ssp-4-1	NZ_AXVE01000011.1	-	120561	120531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1033	JGI24024J18818_10141399	+	497	527	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1034	2204743222	-	7004	6972	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-1035	2157908317	-	7005	6973	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Lpo-1-1	NZ_APCP01000064.1	-	31463	31431	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Lac-10-1	NZ_BACS01000323.1	+	3193	3225	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-1036	2204529503	+	210	242	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-1037	2157700330	-	115	83	RNA → hypo→
Lha-2-1	NZ_AUEH01000024.1	+	33012	33044	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Lsh-1-1	NZ_KI271609.1	+	4007	4039	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-1038	JGI25151J46595_10001160	+	404	435	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-1039	JGI25151J46595_10040961	-	97	66	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-1040	JGI25151J46595_10160259	+	129	160	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
Bsp-36-1	NZ_CVPA01000001.1	-	2715811	2715778	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bam-14-1	NZ_AWQY01000001.1	+	376504	376537	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsp-65-1	NZ_LDUN01000006.1	-	82154	82121	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bam-19-1	NZ_KB206087.1	+	429369	429402	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bam-7-1	NC_016784.1	-	3652345	3652312	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bam-12-1	NC_020272.1	+	365167	365200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bam-13-1	NC_023073.1	-	3586155	3586122	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsp-78-1	NZ_CP010406.1	+	2434203	2434236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bam-9-2	NZ_CP010556.1	-	3527608	3527575	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bve-4-1	NZ_CP006890.1	-	3733812	3733779	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bve-2-1	NZ_CP007165.1	-	3688006	3687973	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bam-9-3	NZ_CP011278.1	-	3524652	3524619	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bve-1-1	NZ_CP011346.1	-	3740648	3740615	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bam-21-1	NZ_AMPK01000004.1	+	201753	201786	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsp-34-1	NZ_LAKC01000010.1	-	628356	628323	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsu-18-1	NZ_AMCA01000303.1	+	4300	4333	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bmo-2-1	NZ_ASJT01000105.1	-	9779	9746	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Sai-1-2	NZ_KE007193.1	-	641613	641580	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bam-4-1	NC_017188.1	-	3565005	3564972	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bam-3-1	NC_017190.1	-	3611825	3611792	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bam-5-1	NC_017191.1	-	3566668	3566635	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bam-1-1	NC_014551.1	-	3595990	3595957	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsu-23-1	NZ_AWXG01000034.1	+	431293	431326	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsu-47-1	NZ_CP007409.1	-	3624807	3624774	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsp-27-1	NZ_JXAJ01000001.1	+	580404	580437	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsp-5-1	NC_017743.1	-	3700469	3700436	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bva-1-1	NZ_JH600237.1	-	355087	355054	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsu-35-1	NZ_AJHM01000011.1	-	146308	146275	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsu-34-1	NZ_AJHL01000019.1	-	135154	135121	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsu-37-1	NZ_AJHO01000010.1	-	629627	629594	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsu-36-1	NZ_AJHN01000013.1	-	368376	368343	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsu-29-1	NZ_AMXN01000001.1	-	386697	386664	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsu-33-1	NZ_AFSG01000020.1	-	365508	365475	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsu-3-1	NZ_ADGS01000016.1	-	106516	106483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Jma-2-1	NZ_LILA01000013.1	-	203741	203708	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsu-28-1	NZ_AEHM01000061.1	-	125708	125675	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→
Bsu-5-1	NC_014479.1	-	3613005	3612972	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Tdk (COG1435)PRK04296 (PRK04296)→

Bsu-32-1	NZ_CP010434.1	-	3612998	3612965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-4-1	NC_016047.1	-	3790206	3790173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-32-1	NZ_JPWY01000014.1	+	425314	425347	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
env-1041	JGI11877J14254_119565	-	68	35	RNA →	
env-1042	GBANfinal_FHNL2OP03QJMDD	-	298	265	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	
Bsp-72-1	NZ_JXAQ01000010.1	+	225785	225818	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-38-1	NZ_AVPM01000060.1	-	644910	644877	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) → hypo
Bsp-46-1	NZ_LFZT01000003.1	+	506089	506122	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-48-1	NZ_AGFW01000001.1	+	494266	494299	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-15-1	NZ_CAUC01000015.1	-	644806	644773	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bmu-1-1	NZ_LGUH01000009.1	-	624647	624614	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-6-1	NC_000964.3	-	3803324	3803291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-30-1	NC_017196.2	-	3675052	3675019	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-10-1	NZ_CM000490.1	-	3802359	3802326	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-7-1	NZ_CM000489.1	-	3775336	3775303	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-41-1	NZ_JH600164.1	+	17381	17414	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-1-1	NC_014976.1	-	1804697	1804664	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-9-1	NC_017195.1	-	3606494	3606461	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-2-1	NC_018520.1	-	3734766	3734733	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
					Tdk (COG1435)PRK04296 (PRK04296) →	
Bsu-43-1	NC_019896.1	+	403519	403552	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-27-1	NC_020244.1	-	3642206	3642173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-42-1	NC_020832.1	-	3605096	3605063	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-39-1	NC_020507.1	-	3803329	3803296	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-24-1	NC_022898.1	-	3621179	3621146	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) → hypo
Bsu-14-1	NZ_AP012496.1	-	3630878	3630845	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-6-2	NZ_CP010052.1	-	3803337	3803304	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-38-1	NZ_CP010314.1	-	3782820	3782787	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-97-1	NZ_CP010014.1	-	3439669	3439636	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-44-1	NZ_CP007800.1	-	3776092	3776059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-40-1	NZ_CP008698.1	-	3781363	3781330	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-12-1	NZ_LN680001.1	-	3821333	3821300	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-12-1	NZ_LN649259.1	-	3839370	3839337	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-17-1	NZ_CP007173.1	-	3594029	3593996	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-67-1	NZ_CP011101.1	-	3656783	3656750	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-19-1	NZ_CP011115.1	-	3803352	3803319	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-8-1	NZ_CM000488.1	-	3802318	3802285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-26-1	NZ_ANIP01000016.1	+	8075	8108	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-22-1	NZ_AQGR01000122.1	+	80257	80290	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Psp-40-1	NZ_AVOF01000755.1	+	314	347	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
					rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →	
Bsu-46-1	NZ_APMW01000035.1	+	8558	8591	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-45-1	NZ_APMX01000221.1	+	12037	12070	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-25-1	NZ_AZQS01000001.1	+	419264	419297	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-20-1	NZ_AOTY01000001.1	-	624810	624777	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) → hypo
Bsu-21-1	NZ_BALZ01000225.1	-	36042	36009	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bte-1-1	NZ_AYTO01000009.1	-	97581	97548	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsi-1-1	NZ_LAGT01000025.1	-	10366	10333	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsi-2-1	NZ_AJVF01000039.1	+	357272	357305	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-59-1	NZ_KQ236689.1	-	1238300	1238267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bat-8-1	NZ_AEFU01000001.1	+	154389	154422	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bat-7-1	NZ_AEFM01000002.1	+	154389	154422	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →
Bat-6-1	NZ_AEFW01000008.1	+	154400	154433	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →	Tdk (COG1435)PRK04296 (PRK04296) →

Bat-5-1	NZ_AEFV01000008.1	-	321837	321804	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-1-1	NC_014639.1	-	3225185	3225152	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-14-1	NZ_AEFR01000017.1	-	96226	96193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-3-1	NZ_AEFS01000014.1	+	412950	412983	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-4-1	NZ_AEFT01000005.1	+	154391	154424	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-9-1	NZ_AEFX01000018.1	-	116510	116477	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-13-1	NZ_AEFQ01000015.1	-	96075	96042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-12-1	NZ_AEFP01000005.1	+	154382	154415	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-10-1	NZ_AEFY01000001.1	-	7160	7127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-16-1	NZ_AEFO01000028.1	-	116543	116510	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-2-1	NZ_CP010778.1	-	3150625	3150592	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-17-1	NZ_CP007640.1	-	3150622	3150589	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-31-1	NZ_KN049968.1	+	491770	491803	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-11-1	NZ_AJRJ01000028.1	+	60488	60521	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bat-15-1	NZ_CP011802.1	-	3582239	3582206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Gsp-3-1	NC_012793.1	-	3352755	3352724	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmu-2-1	NC_015690.1	-	8332068	8332036	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmu-1-1	NC_016935.1	-	8401920	8401888	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
Pmu-3-1	NC_017672.3	-	8491650	8491618	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
Pty-1-1	NZ_JNVM01000021.1	+	226105	226137	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → hypo → hypo → hypo →
Pel-1-1	NZ_AFW01000134.1	+	17241	17273	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Peh-1-1	NZ_JFHX01000117.1	-	6087	6055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → hypo → hypo → hypo →
Pgi-1-1	NZ_KB905580.1	+	47463	47495	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → hypo → hypo → hypo → hypo →
Psp-29-1	NZ_JMLS01000043.1	-	6126	6094	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Nma-1-1	NZ_CAVG01000025.1	-	41899	41870	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1043	JGI24731J21663.1114416	+	271	291	RNA → vfiA (TIGR00741) →
Bte-2-1	NZ_LN851186.1	-	3875235	3875202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lga-13-1	NZ_AICN01000021.1	-	56274	56241	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1044	Subgingival_plaque_LANL_C11222194	-	533	502	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → sortase_fam (TIGR01076)Sortase_A (cd06165) → sortase_fam (TIGR01076)Sortase_A (cd06165) →
env-1045	Supragingival_plaque_LANL_scaffold_212735	-	387	356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1046	SRS015215_WUGC_scaffold_60585	+	10090	10121	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1047	SRS058808_LANL_scaffold_75639	-	12573	12542	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → GT_WecA_like (cd06853)mraY (PRK00108) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1048	SRS014691_C2747958	-	181	150	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1049	SRS016331_C3935637	+	51	82	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1050	AUXO010054219.1	+	1093	1119	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1051	AUXO011270623.1	-	268	242	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1052	AUXO013500089.1	-	2645	2619	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1053	AUXO016543257.1	+	22	48	hypo → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → PLN02662 (PLN02662) → MreB_like (cd10225)PRK13930 (PRK13930) →
env-1054	RUMENNODE_4189451_1	-	803	777	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1055	AUXO015505626.1	-	271	245	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1056	AUXO010144317.1	-	519	493	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1057	AUXO011567691.1	+	201	227	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1058	AUXO017972327.1	-	2127	2101	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1059	AUXO014943907.1	+	26	52	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
Esu-1-1	NZ_KE136394.1	-	693694	693662	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lno-1-1	NZ_BAMN01000015.1	+	13011	13043	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1060	2157768806	-	3632	3600	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

env-1061	2204671115	-	175	143	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1062	2204576607	-	346	314	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1063	2158343614	+	370	402	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-1-1	NZ_JXR02000018.1	+	19659	19691	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1064	2205034447	+	3	35	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1065	2157868829	+	3	35	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1066	2157842730	+	168	200	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lfa-3-1	NZ_GL575016.1	+	462497	462529	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1067	2205326546	-	113	81	RNA → RpmE (COG0254)rpmE (PRK00019)rpmE2 (PRK01678) →
env-1068	2205768956	-	49	17	RNA → hypo →
env-1069	2157958570	-	130	98	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1070	2158360337	-	1026	994	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1071	2158215248	+	1955	1987	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lpa-40-1	NZ_BAMH01000001.1	+	33535	33567	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1072	2204592145	-	130	98	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1073	2204759623	-	130	98	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1074	2204902668	-	219	185	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1075	2205863775	-	892	860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1076	2205378811	+	115	147	RNA →
env-1077	AUXO011544979.1	+	300	333	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1078	HCE12Call500_c0130983	-	383	350	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1079	AUXO016321813.1	+	31	59	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1080	AUXO010547256.1	-	1503	1473	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1081	3300000558_10011235	-	8705	8678	PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo → TktA (COG0021)PRK05899 (PRK05899) → MnmG (COG0445)PRK05192 (PRK05192) → RsmG (COG0357)gidB (PRK00107) → BcsQ (COG1192)AAA_31 (pfam13614) → ParB (smart00470)Spo0J (COG1475) → DUF951 (pfam06107) →
env-1082	3300000558_10025197	+	11494	11521	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-1083	JG124732J26686_1021304	-	562	535	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-1084	3300000558_11733789	+	20189	20216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo →
env-1085	3300000568_10173220	-	1263	1236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) →
env-1086	3300001592_10282939	+	145	172	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-1087	3300001605_10004551	-	1637	1610	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo →
env-1088	C687J13896_1000025	-	8927	8900	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo → TktA (COG0021)PRK05899 (PRK05899) → MnmG (COG0445)PRK05192 (PRK05192) → RsmG (COG0357)gidB (PRK00107) → BcsQ (COG1192)AAA_31 (pfam13614) → ParB (smart00470)Spo0J (COG1475) → DUF951 (pfam06107) →
env-1089	C687J26661_1000263	+	11891	11918	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo → TktA (COG0021)PRK05899 (PRK05899) → MnmG (COG0445)PRK05192 (PRK05192) → RsmG (COG0357)gidB (PRK00107) →
env-1090	C687J26609_1000080	+	30209	30236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo → TktA (COG0021)PRK05899 (PRK05899) → MnmG (COG0445)PRK05192 (PRK05192) → RsmG (COG0357)gidB (PRK00107) → BcsQ (COG1192)AAA_31 (pfam13614) → ParB (smart00470)Spo0J (COG1475) → DUF951 (pfam06107) →
env-1091	AUXO014680939.1	-	290	261	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1092	AUXO018499996.1	+	1229	1256	RNA → hypo →
env-1093	AUXO015654006.1	-	159	129	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1094	AUXO015665870.1	-	168	139	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1095	scaffold116237_1_MH0011	+	11558	11589	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1096	DLM006_scaffold1604_48	-	400	369	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-1097	DLF005_scaffold873_28	-	1819	1788	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1098	scaffold3783_3_MH0012	-	1230	1199	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1099	C8408919_1_O2.UC-16	+	1665	1696	RNA → rpmE (PRK00019) →
env-1100	scaffold3759_1_V1.UC-14	+	4949	4980	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1101	AUXO018500014.1	+	475	506	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1102	AUXO011648946.1	-	105	74	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1103	SL_7KL.010_BRINE_10014548	+	2019	2047	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo →
env-1104	SL_8KL.010_SED_10014681	-	2941	2913	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo →
env-1105	SL_8KL.010_SED_10058133	+	931	959	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-1106	SL_5KL.010_BRINE_10000476	-	7556	7527	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo → Cof (COG0561)Hydrolase_3 (pfam08282) → MnmG (COG0445)PRK05192 (PRK05192) → RsmG (COG0357)gidB (PRK00107) → TehA (COG1275) → hypo →
env-1107	scaffold18398_5_MH0031	-	1738	1709	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-1108	AUXO015774907.1	+	144	170	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1109	AUXO017297246.1	+	839	867	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → pssA (TIGR00473)CDP-OH_P.transf (pfam01066) → PRK00723 (PRK00723)PS_Dcarboxylase (pfam02666) → EpsL (COG4632)NAGPA (pfam09992)DUF5011 (pfam16403) → EpsL (COG4632)NAGPA (pfam09992)DUF5011 (pfam16403) →
env-1110	SRS020869_Baylor_scaffold_16775	-	3733	3695	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1111	SRS052697_LANL_scaffold_55776	+	28	66	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
Agr-1-1	NZ_JAFR01000008.1	+	156062	156094	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo → ND5 (MTH00151)DUF1510 (pfam07423) → TktA (COG0021)PRK05899 (PRK05899) → MnmG (COG0445)PRK05192 (PRK05192) → RsmG (COG0357)gidB (PRK00107) → DUF951 (pfam06107) →
env-1112	AUXO012476243.1	+	239	265	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1113	AUXO016581159.1	+	430	458	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → TadA (COG0590)MafB19-deam (pfam14437) →
env-1114	AUXO016692971.1	+	59	85	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo →
env-1115	AUXO018402175.1	+	2437	2463	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1116	AUXO016106023.1	-	236	204	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1117	AUXO014725215.1	+	295	325	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → rim_protein (TIGR01257)DUF1146 (pfam06612) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-1118	SRS011586_WUGC_scaffold_12590	-	3042	3012	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1119	AUXO015284327.1	+	113	143	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1120	AUXO014723598.1	-	601	571	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1121	4491414.3_NODE.610	+	253	284	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1122	NLF005_scaffold40809_5	+	841	872	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1123	NOM007_scaffold19881_17	-	705	674	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1124	SRS019267_WUGC_scaffold_19133	+	141	171	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1125	scaffold41612_1_MH0035	-	275	245	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1126	scaffold10444_1_O2.UC-4	-	2270	2240	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1127	UnmappedStool_Broad_scaffold_1068660	-	502	472	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → hypo →
env-1128	SRS016335_WUGC_scaffold_10606	+	18701	18731	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → hypo → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-1129	4491401.3_NODE_20020	-	5413	5376	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1130	4491412.3_NODE_76939	+	15872	15909	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1131	SRS049995_LANL_scaffold_7413	+	31138	31175	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1132	AUXO016739573.1	-	186	155	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1133	AUXO011888757.1	-	275	242	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1134	JG1994J12354_10205797	-	625	593	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →

env-1135	07_22_PECTIN_DNA_scaffold7405_9	+	1633	1665	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1136	O8_19_POLYDEXT_DNA_scaffold8118_8	+	655	687	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1137	scaffold70386_2_MH0028	+	1501	1538	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1138	scaffold177066_1_MH0012	-	3152	3115	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1139	scaffold63114_3_MH0038	-	266	229	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1140	scaffold111032_6_MH0043	-	25214	25177	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1141	4491410.3_NODE.3015	+	6163	6200	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1142	4491417.3_NODE.443	-	12219	12182	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1143	SRS015782_C3503917	+	101	138	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1144	SRS016335_C5149495	+	101	138	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1145	SRS048870_WUGC_scaffold_10582	+	47080	47117	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1146	scaffold78818_1_MH0009	+	44	81	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1147	scaffold73433_1_MH0066	-	11981	11944	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1148	scaffold75138_2_MH0075	-	4600	4563	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1149	scaffold77905_1_V1_CD-9	+	6094	6131	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1150	4491402.3_NODE.210	+	11945	11982	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1151	4491407.3_NODE.396	-	93635	93598	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1152	4491488.3_NODE.1475	+	52307	52344	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1153	4491490.3_NODE.508	+	123464	123501	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1154	SRS016541_C1560402	-	510	473	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1155	SRS011239_Baylor_scaffold_7795	-	1685	1648	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1156	SRS013476_C3124393	+	101	138	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1157	SRS013687_C2512595	-	510	473	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1158	SRS014235_WUGC_scaffold_15445	+	6150	6187	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1159	SRS016203_C1523113	-	510	473	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1160	SRS019685_WUGC_scaffold_52356	-	2456	2419	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1161	SRS022071_C3064241	-	4175	4138	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1162	SRS024009_Baylor_scaffold_14978	-	11946	11909	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1163	SRS065504_C3190398	-	326	289	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1164	SRS014979_WUGC_scaffold_36099	+	2031	2068	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1165	AUXO014604482.1	-	186	156	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1166	SS_3KL_010_SOIL_10002557	-	6348	6319	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo → Hydrolase_3 (pfam08282)HAD_Pase (cd07516) → MnmG (COG0445)PRK05192 (PRK05192) → RsmG (COG0357)gidB (PRK00107) → TrkG (COG0168) → hypo
env-1167	SL_3KL_010_SED_10143958	+	940	969	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1168	AUXO013330472.1	+	709	739	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1169	C687J13239_1000702	+	13944	13972	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo →
env-1170	SakLake120mDRAFT_c0000643	-	13148	13120	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo → TktA (COG0021)PRK05899 (PRK05899) → MnmG (COG0445)PRK05192 (PRK05192) → RsmG (COG0357)gidB (PRK00107) → BcsQ (COG1192)AAA_31 (pfam13614) → ParB (smart00470)Spo0J (COG1475) → DUF951 (pfam06107) →
env-1171	BS_KBA_SWE12_21m.c10169119	+	346	374	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1172	BS_KBA_SWE12_21m.c10534462	+	125	153	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1173	BS_KBA_SWE12_21m.c10227724	-	46	18	RNA →
env-1174	BS_KBA_SWE02_21m.10520892	+	149	177	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1175	3300000558_10171620	-	3674	3646	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → RseC_MucC (pfam04246) → TktA (COG0021)PRK05899 (PRK05899) →
env-1176	3300001605_10461389	-	587	559	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-1177	AUXO018660770.1	+	201	234	RNA →
env-1178	DLM022_scaffold47491_2	-	2757	2724	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1179	4491423.3_NODE.55225	+	274	307	RNA → hypo →

env-1180	UnmappedStool_Broad_C252973095	+	238	271	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1181	DOF002_scaffold67521_1	-	8868	8835	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1182	scaffold4818_2_MH0033	-	6655	6624	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1183	4491487.3_NODE.36255	-	194	163	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1184	UnmappedStool_Broad_C253824745	+	1657	1688	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1185	SRS049995_LANL_scaffold_41479	-	17405	17374	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1186	DLF005_scaffold22529_20	-	1910	1879	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1187	scaffold55864_1_MH0024	+	736	767	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1188	SL_3KL_010_SED_10386470	-	84	54	RNA →
env-1189	AUXO016893802.1	-	348	317	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1190	AUXO013205533.1	-	927	896	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) →
env-1191	scaffold110634_1_MH0033	+	575	607	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → SpoIID (COG2385)SpoIID_LytB (TIGR02669) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-1192	scaffold73146_1_MH0035	-	2482	2450	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → SpoIID (COG2385)SpoIID_LytB (TIGR02669) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-1193	UnmappedStool_Broad_C253558353	-	162	130	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1194	DOM014_scaffold175_1	+	11760	11792	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1195	SRS049995_LANL_scaffold_25862	-	46739	46707	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → SpoIID (COG2385)SpoIID_LytB (TIGR02669) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → Tra8 (COG2826)SpoIID (pfam12116) → PRK13930 (PRK13930)MreB_Mbl (pfam06723) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → CheY (COG0784) → HATPase_c (smart00387)HATPase_c (pfam02518) →
env-1196	SRS078176_C2331252	+	1688	1720	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → SpoIID (COG2385)SpoIID (pfam08486) →
env-1197	3300000558_10030915	-	447	420	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-1198	AUXO010231042.1	+	5787	5817	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → hypo → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → MreB_like (cd10225)PRK13930 (PRK13930) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → LytTR (smart00850)LytTR (pfam04397) → CSP (smart00357)CspC (COG1278) → yfiA (TIGR00741)RaiA (COG1544)Ribosom_S30AE_C (pfam16321) → SecA (COG0653)PRK12904 (PRK12904) →
env-1199	AUXO016989467.1	-	1131	1100	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → SpoIID (COG2385)SpoIID (pfam08486) →
env-1200	AUXO014231841.1	+	3562	3595	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1201	AUXO017411865.1	+	2453	2484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → hypo → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → yfiA (TIGR00741)Ribosomal_S30AE (pfam02482) →
env-1202	AUXO013834857.1	-	8878	8847	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1203	2227602434	-	1896	1866	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → hypo → Peptidase_M23 (pfam01551) → SpoIID (pfam12116) →
env-1204	JGI994J12354_10000780	+	359	389	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → hypo → Peptidase_M23 (pfam01551) → SpoIID (pfam12116) → MreB_like (cd10225)PRK13930 (PRK13930) →
env-1205	IMNBL1_c0133606	-	538	508	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1206	AUXO015478559.1	+	273	302	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1207	AUXO013760466.1	-	331	301	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1208	4491477.3_NODE.1076	-	3022	2991	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1209	3300001592_10522345	-	327	300	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1210	AUXO013710643.1	-	2677	2647	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → hypo → SpoIID (COG2385)SpoIID_LytB (TIGR02669) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-1211	AUXO013726310.1	-	252	222	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1212	AUXO012175234.1	+	1448	1480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1213	AUXO013960360.1	-	83	52	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1214	AUXO013939667.1	+	1121	1152	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1215	RUMENNODE.3847397.1	+	357	387	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1216	AUXO012691611.1	+	29	59	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → YcaP (COG2323) → PRK10776 (PRK10776)Nudix_Hydrolase_1 (cd03674) → hypo →

env-1217	AUXO011512029.1	+	159	189	RNA → hypo → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1218	O8_19_POLYDEXT_DNA_scaffold41145.1	+	5890	5919	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → YcaP (COG2323) → Nudix_Hydrolase_1 (cd03674)IPP_isom_1 (TIGR02150) → hypo →
env-1219	AUXO011585839.1	-	183	153	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1220	AUXO012730652.1	+	843	873	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1221	RUMENNODE_4178079.1	-	13408	13378	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → YcaP (COG2323) →
env-1222	SRS011134_C5183664	-	3140	3109	RNA → ←COG3415 (COG3415)HTH_28 (pfam13518)
env-1223	SRS049959_WUGC_scaffold_60445	+	13512	13543	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1224	AUXO015487162.1	-	138	107	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1225	SRS049164_WUGC_scaffold_33709	+	1599	1630	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1226	SRS016335_WUGC_scaffold_45869	-	8316	8285	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1227	SRS047014_WUGC_scaffold_63392	-	774	743	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1228	08_07_CONTROL_DNA_scaffold13296_18	+	817	848	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1229	08_07_XOS_DNA_scaffold66974.1	+	19539	19570	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1230	AUXO014710346.1	-	273	242	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1231	AUXO017881809.1	+	781	812	RNA →
env-1232	AUXO012078207.1	-	183	153	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1233	SRS015663_WUGC_scaffold_1238	-	20838	20806	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1234	AUXO013159041.1	+	29	59	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → YcaP (COG2323) →
env-1235	07_22_CONTROL_DNA_scaffold85199_3	+	352	378	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1236	AUXO012376566.1	+	1531	1559	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1237	AUXO015435427.1	-	1944	1915	Lactamase_B (smart00849)metallo-hydrolase-like_MBL-fold (cd07743) → RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → int_mem_ywzB (TIGR02327)DUF1146 (pfam06612) → SpoIID (COG2385)SpoIID_LytB (TIGR02669) →
env-1238	JGI24708J26588_10236894	-	59	34	RNA →
env-1239	SR_TTP_S3_1000105	+	34613	34642	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo → hypo → TktA (COG0021)PRK05899 (PRK05899) MnmG (COG0445)PRK05192 (PRK05192) → RsmG (COG0357)gidB (PRK00107) → BcsQ (COG1192)AAA_31 (pfam13614) → ParB (smart00470)Spo0J (COG1475) → DUF951 (pfam06107) →
env-1240	AUXO016960809.1	-	487	455	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Pacs-1 (pfam10254) →
env-1241	AUXO016034446.1	-	1236	1204	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Pacs-1 (pfam10254) → HTH_XRE (smart00530)XRE (COG1476) → hypo →
env-1242	AUXO011570238.1	+	4931	4963	RNA →
env-1243	AUXO012487438.1	+	2243	2275	RNA →
env-1244	AUXO010195109.1	+	4196	4228	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1245	AUXO014081958.1	+	1464	1496	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1246	NLF005_scaffold13642_7	+	92	122	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → SpoIID (COG2385)SpoIID_LytB (TIGR02669) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → SpoIIID (pfam12116) → MreB_like (cd10225)PRK13930 (PRK13930) →
env-1247	scaffold87272_2_MH0081	-	271	241	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1248	AUXO018221316.1	-	119	89	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) →
env-1249	scaffold1635_5_MH0082	+	249	278	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1250	SR_TP_S2_1000079	+	14131	14157	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1251	3300001605_10172276	+	1019	1045	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1252	AUXO018756927.1	+	1687	1717	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1253	JGI24710J26742_10162176	+	368	399	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1254	AUXO016786490.1	+	2740	2766	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1255	AUXO011123210.1	-	174	143	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1256	AUXO015180417.1	+	171	201	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → YcaP (COG2323) →
env-1257	O8_19_POLYDEXT_DNA_scaffold85068_3	+	626	656	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1258	scaffold4959_2_MH0065	+	497	523	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1259	JGI24713J26584_10183766	+	158	188	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1260	AUXO013227359.1	-	65	34	RNA →

env-1261	AUXO010399693.1	-	1188	1160	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → hypo →
env-1262	AUXO012301092.1	-	266	236	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1263	AUXO014076405.1	+	105	135	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → rim_protein (TIGR01257)DUF1146 (pfam06612) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → MreB_like (cd10225)PRK13930 (PRK13930) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
env-1264	SRMUA_GNVGR9Q01AT41D	+	16	47	LytTR (smart00850)LytTR (pfam04397) →
env-1265	AUXO010283157.1	+	10331	10362	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → MreB_like (cd10225)PRK13930 (PRK13930) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
env-1266	AUXO014310563.1	+	270	301	LytTR (smart00850)LytTR (pfam04397) → RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → rim_protein (TIGR01257)DUF1146 (pfam06612) → nlpD (PRK10871)Peptidase_M23 (pfam01551) → MreB_like (cd10225)PRK13930 (PRK13930) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
env-1267	AUXO011380099.1	+	513	544	RNA →
env-1268	AUXO014310801.1	-	4992	4964	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → MreB_like (cd10225)PRK13930 (PRK13930) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
env-1269	AUXO017364526.1	-	66	35	RNA →
env-1270	AUXO011848655.1	+	2629	2660	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → MreB_like (cd10225)PRK13930 (PRK13930) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
env-1271	AUXO014937547.1	-	5403	5374	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → ycf1 (CHL00204)Amidoligase_2 (pfam12224) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → MreB_like (cd10225)PRK13930 (PRK13930) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → CheY (COG0784) →
env-1272	AUXO015447990.1	-	61	32	RNA →
env-1273	AUXO011771154.1	-	1416	1383	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → Acetyltransf_1 (pfam00583)Acetyltransf_7 (pfam1350) → hypo → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1274	SRS013951_C2824150	-	311	281	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1275	AUXO016081430.1	+	434	465	RNA →
env-1276	AUXO016398220.1	-	197	166	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1277	AUXO016483557.1	+	979	1009	RNA → rpmE (PRK00019)SGNH_hydrolase (cd00229)Ribosomal.L31 (pfam01197)Lipase_GDSL_2 (pfam13472) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → hypo → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-1278	AUXO016479613.1	+	343	374	RNA →
env-1279	AUXO013409902.1	+	482	514	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1280	AUXO017875554.1	+	7952	7983	RNA → SGNH_hydrolase (cd00229) → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-1281	AUXO012311456.1	-	82	52	RNA → rpmE (PRK00528)Ribosomal.L31 (pfam01197) →
env-1282	AUXO013805451.1	-	82	52	RNA → rpmE (PRK00528)Ribosomal.L31 (pfam01197) →
env-1283	AUXO013112282.1	-	284	252	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1284	AUXO014919177.1	-	130	100	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1285	AUXO012946948.1	-	173	142	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1286	AUXO013252499.1	+	233	263	RNA → rpmE (PRK00528)rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1287	SRS019582_C2881833	-	282	252	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1288	SRS012273_C3602910	-	368	337	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1289	SRS022071_C2951214	+	292	323	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1290	AUXO012038790.1	+	252	281	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → hypo → thioredoxin (TIGR01068)TRX_family (cd02947) → bPH_3 (pfam14470) → hypo →
env-1291	AUXO011416548.1	-	68	41	RNA →
env-1292	AUXO017181277.1	-	182	152	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →

env-1293	AUXO016134728.1	+	1040	1070	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) →
env-1294	AUXO011423476.1	+	2455	2485	RNA →
env-1295	AUXO011517276.1	+	28	58	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1296	JG1994J12354.10524623	+	105	134	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1297	AUXO012504192.1	+	415	446	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1298	AUXO014624430.1	+	363	389	RNA → rpmE (PRK00019) →
env-1299	AUXO012372966.1	+	82	112	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1300	SRMUA_GNVGR9Q01DNPCS	+	60	87	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1301	AUXO016542428.1	-	1502	1471	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1302	AUXO014856272.1	-	1536	1505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1303	AUXO012441124.1	-	149	121	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1304	3300000558.10084062	+	2958	2985	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
env-1305	AUXO012809103.1	-	1236	1207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → hypo →
env-1306	AUXO010815353.1	+	82	112	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → YcaP (COG2323) →
env-1307	AUXO015985898.1	-	109	79	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1308	RUMENNODE_4377773.84001	+	25108	25136	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)WcaJ_sugtrans (TIGR03023)HATPase_c.5 (pfam14501) →
env-1309	AUXO011141601.1	-	618	590	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1310	AUXO010916397.1	+	5920	5948	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → MdoB (COG1368)PRK13759 (PRK13759) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)PRK11086 (PRK11086) →
env-1311	AUXO017784779.1	-	2057	2027	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) →
env-1312	scaffold30364.4_MH0066	-	520	493	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1313	C4277000.1_V1.UC-14	-	882	855	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1314	scaffold4347.1_V1.UC-19	+	160	187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1315	SRS049164.WUGC_scaffold.87487	-	15418	15391	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1316	DOF002_scaffold60922.2	+	3588	3615	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1317	DOM013.scaffold66250.2	+	114	141	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1318	DOM014.scaffold2248.7.2	-	1915	1888	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1319	NOF001_scaffold58173.1	+	4467	4494	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1320	NOF014_scaffold69538.9	-	2379	2352	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1321	NOM013_scaffold55288.1	-	18149	18122	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1322	NOM019_scaffold49208.1	+	249	276	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1323	SRS011271.WUGC_scaffold.4131	-	16966	16939	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1324	SRS011586.WUGC_scaffold.25822	-	10363	10336	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1325	SRS015578.C2525326	-	256	229	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1326	SRS016335.WUGC_scaffold.45818	-	9930	9903	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1327	SRS020233.C4068279	+	109	136	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1328	SRS020869.C3081547	-	165	138	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1329	SRS021948.C2732547	-	488	461	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1330	SRS022071.C3057294	-	2824	2797	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1331	SRS023526.C2997413	-	272	245	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1332	SRS047014.C3660042	+	154	181	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1333	SRS048870.WUGC_scaffold.52503	+	97	124	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1334	SRS049959.C3987040	-	11396	11369	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1335	SRS049995.LANL_scaffold.33915	-	4520	4493	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1336	SRS078176.LANL_scaffold.951	-	4520	4493	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1337	scaffold129929.1_MH0012	+	17	44	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1338	SRS012273.C3781305	+	19	46	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1339	SRS014979.C3210300	+	19	46	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-1340	SRS024435_C3024763	+	19	46	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1341	SRS045645_C2053142	-	2027	2000	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1342	scaffold4802_1_MH0014	-	1015	989	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1343	C4062675_1_MH0016	-	447	421	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1344	scaffold207_2_MH0026	-	473	447	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1345	scaffold29535_1_MH0035	+	8024	8050	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)HATPase_c.5 (pfam14501) →
env-1346	scaffold78402_1_MH0064	-	449	423	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1347	scaffold87074_1_MH0075	+	319	345	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1348	scaffold104927_2_V1.CD-14	-	230	204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1349	4491482.3_NODE.16610	-	635	609	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1350	4491487.3_NODE.42294	-	2870	2844	RNA → rpmE (PRK00019)SGNH_hydrolase (cd00229)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)REC (cd00156) →
env-1351	NLM025_scaffold35660_1	-	351	325	RNA → rpmE (PRK00019)Lipase_GDSL (pfam00657)Ribosomal_L31 (pfam01197) →
env-1352	NLM029_scaffold44136_3	-	436	410	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1353	SRS011134_C5157013	-	291	265	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1354	SRS011239_Baylor_scaffold_29786	+	725	751	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1355	SRS012273_Baylor_scaffold_10464	+	11441	11467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → HATPase_c (pfam02518)HATPase_c.5 (pfam14501) →
env-1356	SRS017701_Baylor_scaffold_18247	+	358	384	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1357	SRS018656_WUGC_scaffold_5423	-	1241	1215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → LTA_synthase (cd16015) →
env-1358	SRS022071_C2877461	+	104	130	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1359	SRS050752_LANL_scaffold_27273	+	33215	33241	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)HATPase_c.5 (pfam14501) →
env-1360	4491410.3_NODE.39918	+	398	424	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1361	SRS011302_Baylor_scaffold_316	+	5248	5274	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) →
env-1362	scaffold70250_1_MH0012	+	907	933	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → MdoB (COG1368) →
env-1363	scaffold70665_1_MH0028	+	5114	5140	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)HATPase_c.5 (pfam14501) →
env-1364	scaffold109810_1_MH0033	-	175	149	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1365	scaffold62702_1_MH0066	+	253	279	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1366	scaffold25252_2_MH0081	+	5634	5660	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → LTA_synthase (cd16015) →
env-1367	4491423.3_NODE.40207	-	509	483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1368	DLF003_scaffold13796_5	-	219	193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1369	DOM012_scaffold215_3	+	9962	9988	RNA → rpmE (PRK00019)Lipase_GDSL (pfam00657)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)HATPase_c.5 (pfam14501) →
env-1370	NLM015_scaffold4789_7	+	420	446	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1371	SRS011529_WUGC_scaffold_2327	+	32692	32718	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)HATPase_c.5 (pfam14501) →
env-1372	SRS015782_WUGC_scaffold_16117	-	5795	5769	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)HATPase_c.5 (pfam14501) →
env-1373	SRS018817_C1984407	-	174	148	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1374	SRS020233_C4276649	+	1616	1642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)HATPase_c.5 (pfam14501) →
env-1375	SRS021948_C2860438	+	1458	1484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1376	SRS047044_WUGC_scaffold_15413	+	11469	11495	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → hypo →
env-1377	SRS052697_C3372869	-	2793	2767	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)REC (cd00156) →
env-1378	SRS065504_LANL_scaffold_33624	-	18639	18613	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)HATPase_c.5 (pfam14501) →
env-1379	C2077074_1_MH0079	+	2299	2326	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-1380	DLF003_scaffold7759.1	-	143	116	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1381	SRS011271_WUGC_scaffold_24401	-	16266	16240	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → hypo →
env-1382	SRS023526_Baylor_scaffold_35082	+	302	328	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK13759 (PRK13759)LTA_synthase (cd16015) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)HATPase.c.5 (pfam14501) →
env-1383	AUXO018649474.1	+	79	105	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1384	SRS011134_C4857448	+	310	337	RNA → Ribosomal_L31 (pfam01197) →
env-1385	DLF004_scaffold6617.4	-	1944	1917	RNA → rpmE (PRK00019)SGNH_hydrolase (cd00229)Ribosomal_L31 (pfam01197)Lipase_GDSL_2 (pfam13472) PRK12363 (PRK12363)LTA_synthase (cd16015) →
env-1386	DLF010_scaffold22656.1	-	107791	107764	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK12363 (PRK12363)MdoB (COG1368) → cztr_silR_copR (TIGR01387)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)HATPase.c.5 (pfam14501) →
env-1387	4491414.3_NODE.12936	+	3149	3176	RNA → SGNH_hydrolase (cd00229)Lipase_GDSL_2 (pfam13472) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK12363 (PRK12363)LTA_synthase (cd16015) → cztr_silR_copR (TIGR01387)LytTR (smart00850)LytT (COG3279) → CitA (COG3290)HATPase.c.5 (pfam14501) →
env-1388	AUXO017324133.1	-	24508	24481	RNA → SGNH_hydrolase (cd00229)Lipase_GDSL_2 (pfam13472) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → MdoB (COG1368)PRK13759 (PRK13759) → PRK11361 (PRK11361)LytTR (smart00850)LytT (COG3279) → PRK11086 (PRK11086)HATPase.c (pfam0251)
env-1389	AUXO015658258.1	-	64	35	RNA →
env-1390	AUXO014149459.1	-	2076	2045	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → CYK3 (COG5279) →
env-1391	scaffold84569_2_MH0038	-	567	538	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1392	SRS011586_WUGC_scaffold_19197	-	7279	7250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1393	AUXO015167000.1	+	837	867	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1394	AUXO017088504.1	+	293	323	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1395	UnmappedStool_Broad_C253180942	-	644	614	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1396	NLM026_scaffold61948_3	+	70	100	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1397	AUXO016873222.1	+	8429	8460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1398	AUXO017217394.1	+	2799	2830	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → MreB_like (cd10225)PRK13930 (PRK13930) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
env-1399	C1643059.1_MH0013	+	4131	4161	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → hypo →
env-1400	scaffold22971.1_MH0030	+	23528	23558	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1401	SRS011134_C5179588	+	1191	1221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → DUF1146 (pfam06612) → PRK11649 (PRK11649)Peptidase_M23 (pfam01551) → SpoIID (pfam12116) →
env-1402	2227080773	-	117461	117431	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → YcaP (COG2323) → hypo →
env-1403	JGI996J12353_1033205	+	84	114	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1404	AUXO017836399.1	-	2207	2180	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1405	AUXO014543416.1	+	2000	2027	RNA →
env-1406	AUXO014166827.1	+	585	612	RNA →
env-1407	AUXO013533263.1	-	71	44	RNA →
env-1408	AUXO015166946.1	+	1763	1790	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1409	SRS053917_LANL_scaffold_40441	-	12785	12754	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo → vfiA (TIGR00741)Ribosomal_S30AE (pfam02482)Ribosom_S30AE_C (pfam16321) → SecA (COG0653)PRK12904 (PRK12904)SEC-C (pfam02810) →
env-1410	SRS018157_C4833607	+	933	964	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1411	SRS022725_LANL_scaffold_39231	-	12149	12118	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo → vfiA (TIGR00741)Ribosomal_S30AE (pfam02482)Ribosom_S30AE_C (pfam16321) → SecA (COG0653)PRK12904 (PRK12904)SEC-C (pfam02810) →
env-1412	SRS047113_LANL_scaffold_83317	+	5415	5446	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) → hypo →
env-1413	SRS018394_C3985949	-	346	315	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-1414	SRS018739_C3705271	+	412	443	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-1415	SRS019028_WUGC_scaffold.67797	-	1216	1185	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → ECA_wecA (TIGR02380)GT_WecA_like (cd06853) →
env-1416	SRS013705_Baylor_scaffold.29455	-	274	244	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1417	SRS015434_C5843902	+	15	45	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1418	SRS049389_C4729994	-	1752	1722	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-1419	SRS017209_C2431801	+	21	51	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1420	SRS022530_LANL_scaffold.38958	+	323	353	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1421	SRS021496_C2799659	-	346	316	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1422	SRS057692_C2577720	-	245	215	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1423	SRS015762_C3673319	-	5711	5680	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo →
env-1424	SRS064329_LANL_scaffold.43584	-	16350	16319	vfIA (TIGR00741)RaiA (cd00552)Ribosom_S30AE_C (pfam16321) → RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo →
env-1425	SRS014271_C2962237	-	3039	3008	vfIA (TIGR00741)RaiA (cd00552)Ribosom_S30AE_C (pfam16321) → SecA (COG0653)PRK12904 (PRK12904)SEC-C (pfam02810) → RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo →
env-1426	SRS016002_C2638962	+	1640	1671	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → Rfe (COG0472) →
env-1427	SRS016319_WUGC_scaffold.23354	+	464	495	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo →
env-1428	SRS016569_C2512869	+	593	624	vfIA (TIGR00741)RaiA (cd00552)Ribosom_S30AE_C (pfam16321) → SecA (COG0653)PRK12904 (PRK12904)SEC-C (pfam02810) → RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo →
env-1429	SRS017209_C2525129	+	21	52	vfIA (TIGR00741)RaiA (cd00552)Ribosom_S30AE_C (pfam16321) → RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1430	SRS018300_C3361889	-	1806	1775	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) →
env-1431	SRS021496_C2821855	+	460	491	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1432	SRS024081_LANL_scaffold.71404	-	16350	16319	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo →
env-1433	SRS042643_WUGC_scaffold.65941	-	5725	5694	vfIA (TIGR00741)RaiA (cd00552)Ribosom_S30AE_C (pfam16321) → SecA (COG0653)PRK12904 (PRK12904)SEC-C (pfam02810) → RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo →
env-1434	SRS049389_WUGC_scaffold.9485	+	15	46	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo →
env-1435	SRS050244_LANL_scaffold.89207	+	322	353	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1436	SRS057205_C3408538	-	470	439	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1437	SRS062544_LANL_scaffold.15860	+	10967	10998	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) → GT_WecA_like (cd06853)mraY (PRK00108) → hypo →
env-1438	SRS015434_C5843986	-	559	528	vfIA (TIGR00741)RaiA (cd00552)Ribosom_S30AE_C (pfam16321) → SecA (COG0653)PRK12904 (PRK12904)SEC-C (pfam02810) → RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1439	JGI24707J26582_10016376	+	3058	3088	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1440	JGI24708J26588_10079158	+	766	796	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1441	JGI24709J26583_10002472	-	2550	2520	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1442	JGI24710J26742_10002773	-	2550	2520	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →
env-1443	AUXO011514504.1	-	134	105	RNA → rpmE (PRK00019)Ribosomal.L31 (pfam01197) →

Aoc-1-1	NZ_LK028559.1	-	1499011	1498981	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo → hypo → TktA (COG0021)PRK05899 (PRK05899)MnmG (COG0445)PRK05192 (PRK05192) → RsmG (COG0357)gidB (PRK00107) → DUF951 (pfam06107) →
env-1444	AUXO011017412.1	-	412	381	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1445	SL_3KL_010_SED.10003070	+	5652	5682	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → TadA (COG0590)MafB19-deam (pfam14437) → hypo → hypo →
env-1446	BGMT1_NODE.617975	-	5130	5099	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1447	HBC_scaff.10321092	+	809	840	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1448	HBC_ctgs.1025513	+	809	840	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lap-1-1	NZ_KQ034000.1	-	943418	943387	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1449	BGMT1_NODE.652147	-	6023	5992	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1450	HBC_scaff.10316565	-	378	346	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lsp-13-1	NZ_JRJB01000014.1	-	24691	24659	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1451	BGMT1_NODE.398163	+	8659	8691	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lsp-14-1	NZ_CP009531.1	-	1466989	1466957	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lhe-2-1	NZ_KQ034047.1	-	141369	141337	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lku-1-1	NZ_KQ033871.1	-	1476483	1476451	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lki-1-1	NZ_KQ034007.1	-	1482946	1482914	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1452	BGMT1_NODE.274826	-	167	135	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lme-1-1	NZ_KQ034022.1	-	150781	150749	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1453	HBC_scaff.10010740	+	12482	12514	RNA →
env-1454	HBC_ctgs.1000528	+	8470	8502	RNA →
env-1455	HBC_scaff.10029449	-	222	190	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1456	HBC_scaff.10290669	+	700	732	RNA →
env-1457	HBC_ctgs.1243392	-	222	190	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1458	HBC_ctgs.1078860	+	700	732	RNA →
env-1459	AUXO017032561.1	-	631	600	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1460	AUXO011120786.1	+	459	485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK05571 (PRK05571)LacAB_rpiB (pfam02502) →
env-1461	4491477.3_NODE.17856	-	7482	7445	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1462	scaffold72512.1_MH0030	+	4464	4501	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1463	scaffold36821.2_MH0063	+	24014	24051	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1464	C3728251.1_MH0081	-	290	253	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1465	4491403.3_NODE.270	-	47741	47704	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1466	SRS011134_Baylor_scaffold.23202	-	157	120	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1467	SRS011271_WUGC_scaffold.22780	-	25462	25425	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1468	SRS017307_Baylor_scaffold.2382	-	311	274	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1469	SRS022609_C3091801	-	312	275	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1470	SRS023526_C2985960	+	101	138	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1471	scaffold16809.2_MH0022	-	760	723	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1472	C4139562.1_MH0024	+	184	221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1473	scaffold76898.1_MH0054	-	1475	1438	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1474	4491421.3_NODE.66616	+	1471	1508	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1475	DLM019_scaffold25402.3	+	922	959	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1476	AUXO017642701.1	+	963	933	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1477	AUXO014022239.1	-	67	93	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1478	RUMENNODE.3890134.54500	+	4623	4649	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → PRK10860 (PRK10860)TadA (COG0590) →
Efa-353-1	NZ_KB029550.1	-	223357	223325	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-526-1	NZ_KE351936.1	+	9306	9338	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-537-1	NZ_AWWM01000112.1	-	6178	6210	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1479	DLM012_scaffold178.4	-	1663	1631	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1480	longitudinal.178.386	+	58976	59008	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-544-1	NZ_JAAM01000007.1	-	69039	69007	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-335-1	NZ_AUWX01000117.1	+	5605	5637	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-505-1	NZ_LBIN01000026.1	+	8852	8884	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-506-1	NZ_LBIM01000105.1	+	9159	9191	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-425-1	NZ_AITP01000010.1	+	63892	63924	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-334-1	NZ_AUWW01000110.1	-	3516	3484	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-340-1	NZ_AUWV01000070.1	-	7538	7506	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-535-1	NZ_AWVP01000021.1	-	7580	7548	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-539-1	NZ_AWWN01000088.1	+	41487	41519	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-540-1	NZ_AWVO01000049.1	-	7504	7472	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-536-1	NZ_ASAL01000014.1	+	40701	40733	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-587-1	NZ_ABQJ01000011.1	-	45637	45605	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-588-1	NZ_ABR01000165.1	+	23876	23908	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-20-1	NZ_AJQZ01000052.1	-	7648	7616	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-545-1	NZ_JAAJ01000007.1	-	74320	74288	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-338-1	NZ_AEOU01000253.1	+	6244	6276	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-339-1	NZ_AEDZ01000214.1	+	6288	6320	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-16-1	NZ_AJRF02000013.1	+	59040	59072	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-542-1	NZ_JAAK01000063.1	-	6286	6254	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-586-1	NZ_ABQI01000014.1	-	45654	45622	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-543-1	NZ_JAAL01000009.1	-	75132	75100	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-589-1	NZ_ABSC01000180.1	-	3586	3554	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-330-1	NZ_AJTW01000196.1	+	6625	6657	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-585-1	NZ_ACOS01000122.1	+	43812	43844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-591-1	NZ_ADM01000075.1	-	28289	28257	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-583-1	NZ_ACZZ01000032.1	+	23875	23907	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-21-1	NZ_AJRD01000052.1	+	27318	27350	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-19-1	NZ_AJQX01000101.1	+	6288	6320	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-333-1	NZ_ACJQ02000001.1	+	927330	927362	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-584-1	NC_017960.1	+	728948	728980	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-15-1	NZ_AJRB03000048.1	+	20083	20115	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-580-1	NC_017022.1	+	732071	732103	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-508-1	NC_020207.1	-	2017175	2017143	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-590-1	NZ_ABQA01000008.1	-	7649	7617	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-594-1	NZ_ABSW01000073.1	+	6353	6385	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-592-1	NZ_GG703586.1	+	23876	23908	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-581-1	NZ_GG670309.1	-	219486	219454	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-574-1	NZ_GG688464.1	+	40627	40659	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-577-1	NZ_GG692469.1	+	248894	248926	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-576-1	NZ_GG688550.1	+	52869	52901	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-575-1	NZ_GG692539.1	+	253964	253996	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-579-1	NZ_GG688488.1	-	158427	158395	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-593-1	NZ_GG669062.1	+	41557	41589	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-578-1	NZ_GG688437.1	+	44705	44737	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-582-1	NZ_GG670326.1	-	265655	265623	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-379-1	NZ_KB029743.1	-	212272	212240	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-429-1	NZ_KN150989.1	-	1835052	1835020	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-533-1	NZ_GL454927.1	-	99217	99185	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-528-1	NZ_GL455899.1	+	2806	2838	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-530-1	NZ_GL456960.1	-	7536	7504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-529-1	NZ_GL456579.1	+	8753	8785	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-532-1	NZ_GL476228.1	-	58872	58840	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-520-1	NZ_JH807512.1	-	73032	73000	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-517-1	NZ_JH807894.1	-	7534	7502	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-534-1	NZ_JH804714.1	+	41265	41297	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-521-1	NZ_JH807180.1	-	7534	7502	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-511-1	NZ_JH810149.1	-	7536	7504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-329-1	NZ_JH811665.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-331-1	NZ_JH812054.1	-	7536	7504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-317-1	NZ_JH811476.1	-	75604	75572	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-349-1	NZ_JH810334.1	-	7536	7504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-541-1	NZ_JH806654.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-513-1	NZ_JH808985.1	+	6274	6306	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-346-1	NZ_JH809915.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-316-1	NZ_JH809460.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-347-1	NZ_JH811408.1	+	2744	2776	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-519-1	NZ_JH807528.1	-	7534	7502	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-344-1	NZ_JH810983.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-325-1	NZ_JH812576.1	+	6274	6306	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-320-1	NZ_JH814080.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-516-1	NZ_JH808111.1	-	7536	7504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-522-1	NZ_JH806976.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-514-1	NZ_JH808870.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-319-1	NZ_JH813837.1	-	7536	7504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-512-1	NZ_JH809227.1	-	7535	7503	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-342-1	NZ_JH811828.1	+	6272	6304	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-341-1	NZ_JH813598.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-322-1	NZ_JH812725.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-510-1	NZ_JH810528.1	+	6251	6283	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-345-1	NZ_JH809769.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-332-1	NZ_JH813224.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-324-1	NZ_JH812225.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-323-1	NZ_JH812970.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-518-1	NZ_JH808617.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-336-1	NZ_JH813478.1	-	7536	7504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-337-1	NZ_JH814258.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Edu-3-1	NZ_JH992913.1	-	613071	613039	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-402-1	NZ_KB030118.1	+	255203	255235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-393-1	NZ_KB030094.1	+	695384	695416	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-394-1	NZ_KB029982.1	+	44399	44431	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-368-1	NZ_KB029483.1	-	213888	213856	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-361-1	NZ_KB029403.1	+	60851	60883	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-356-1	NZ_KB029682.1	-	1934997	1934965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-386-1	NZ_KB029828.1	+	57930	57962	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-400-1	NZ_KB030037.1	+	67862	67894	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-366-1	NZ_KB029503.1	-	253720	253688	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-354-1	NZ_KB029387.1	-	40753	40721	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-369-1	NZ_KB029676.1	+	67496	67528	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-380-1	NZ_KB029722.1	-	211836	211804	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-392-1	NZ_KB030159.1	+	265610	265642	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-397-1	NZ_KB030080.1	-	108961	108929	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-395-1	NZ_KB030014.1	-	219917	219885	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-399-1	NZ_KB029993.1	+	62268	62300	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-363-1	NZ_KB029436.1	-	960038	960006	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-357-1	NZ_KB029490.1	-	459393	459361	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-358-1	NZ_KB029598.1	+	46434	46466	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-391-1	NZ_KB029933.1	-	53494	53462	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-398-1	NZ_KB030041.1	+	682995	683027	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-401-1	NZ_KB029969.1	+	44072	44104	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-365-1	NZ_KB029577.1	+	250792	250824	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-370-1	NZ_KB029606.1	+	45552	45584	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-359-1	NZ_KB029431.1	+	44918	44950	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-367-1	NZ_KB029659.1	-	211055	211023	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-378-1	NZ_KB029972.1	+	432907	432939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-375-1	NZ_KB029716.1	+	48115	48147	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-382-1	NZ_KB029943.1	-	105802	105770	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-377-1	NZ_KB029704.1	-	1594555	1594523	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-351-1	NZ_KB029533.1	+	233100	233132	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-381-1	NZ_KB029905.1	-	1598264	1598232	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-389-1	NZ_KB029866.1	+	45982	46014	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-360-1	NZ_KB029516.1	-	210212	210180	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-350-1	NZ_KB029609.1	-	213120	213088	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-373-1	NZ_KB029748.1	+	68700	68732	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-396-1	NZ_KB030126.1	+	888746	888778	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-500-1	NZ_KB206111.1	-	78995	78963	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-362-1	NZ_KB029455.1	+	253636	253668	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-352-1	NZ_KB029696.1	+	44617	44649	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-384-1	NZ_KB029840.1	+	281406	281438	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-385-1	NZ_KB029962.1	+	326959	326991	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-376-1	NZ_KB029699.1	+	411594	411626	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-501-1	NZ_KB206122.1	-	78218	78186	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-372-1	NZ_KB029904.1	+	77834	77866	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-314-1	NZ_KI518313.1	+	70480	70512	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-507-1	NZ_KI518270.1	+	253442	253474	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-328-1	NZ_KI518258.1	+	257242	257274	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-498-1	NZ_KE352418.1	+	6276	6308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-403-1	NZ_KB932617.1	-	925358	925326	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-408-1	NZ_KB932649.1	+	43998	44030	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-417-1	NZ_KB932697.1	+	45823	45855	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-423-1	NZ_KB932732.1	-	232272	232240	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-388-1	NZ_KB932310.1	+	486449	486481	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-416-1	NZ_KB932687.1	+	40891	40923	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-494-1	NZ_KB944883.1	-	208506	208474	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-326-1	NZ_KB946243.1	-	119734	119702	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-191-1	NZ_KB946795.1	+	45506	45538	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-422-1	NZ_KB932724.1	+	45780	45812	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-493-1	NZ_KB944903.1	-	207618	207586	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-413-1	NZ_KB932656.1	+	329826	329858	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-355-1	NZ_KB932305.1	-	1992059	1992027	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-424-1	NZ_KB945952.1	+	60323	60355	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-475-1	NZ_KB946010.1	-	253687	253655	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-480-1	NZ_KB946685.1	+	64486	64518	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-409-1	NZ_KB932665.1	-	232386	232354	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-404-1	NZ_KB932624.1	+	43998	44030	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-485-1	NZ_KB946908.1	+	771396	771428	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-411-1	NZ_KB945924.1	+	45600	45632	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-418-1	NZ_KB932703.1	-	1430349	1430317	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-421-1	NZ_KB932718.1	+	45649	45681	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-426-1	NZ_KB932745.1	+	43998	44030	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-405-1	NZ_KB932639.1	-	230561	230529	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-492-1	NZ_KB947018.1	-	253035	253003	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-407-1	NZ_KB932671.1	-	230654	230622	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-420-1	NZ_KB945940.1	+	43998	44030	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-428-1	NZ_KB932766.1	-	210553	210521	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-478-1	NZ_KB946134.1	+	255837	255869	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-444-1	NZ_KB947903.1	-	206421	206389	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-490-1	NZ_KB946990.1	-	151958	151926	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-482-1	NZ_KB946712.1	+	70071	70103	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-483-1	NZ_KB946903.1	-	1377984	1377952	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-487-1	NZ_KB946953.1	+	258359	258391	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-433-1	NZ_KB947584.1	-	1000879	1000847	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-439-1	NZ_KB947721.1	+	66082	66114	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-449-1	NZ_KB948008.1	+	60821	60853	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-491-1	NZ_KB946830.1	-	1257899	1257867	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-458-1	NZ_KB949403.1	+	44027	44059	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-489-1	NZ_KB946824.1	+	264128	264160	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-414-1	NZ_KB932642.1	+	43998	44030	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-479-1	NZ_KB946149.1	-	76166	76134	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-445-1	NZ_KB947916.1	-	208388	208356	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-419-1	NZ_KB932708.1	+	43998	44030	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-476-1	NZ_KB946063.1	+	254275	254307	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-481-1	NZ_KB947049.1	-	255740	255708	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-436-1	NZ_KB947641.1	+	252182	252214	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-446-1	NZ_KB947936.1	-	247560	247528	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-451-1	NZ_KB948052.1	-	225651	225619	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-456-1	NZ_KB948239.1	+	8756	8788	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-461-1	NZ_KB949440.1	+	43998	44030	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-440-1	NZ_KB947747.1	+	98352	98384	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-450-1	NZ_KB948035.1	+	269630	269662	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-459-1	NZ_KB949415.1	-	904667	904635	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-460-1	NZ_KB949423.1	+	43998	44030	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-469-1	NZ_KB949696.1	-	260133	260101	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-412-1	NZ_KB945908.1	+	40855	40887	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-443-1	NZ_KB947850.1	+	252543	252575	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-448-1	NZ_KB947954.1	+	66239	66271	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-454-1	NZ_KB948170.1	-	254051	254019	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-463-1	NZ_KB949473.1	+	44026	44058	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-464-1	NZ_KB949489.1	+	65425	65457	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-472-1	NZ_KB949806.1	+	255072	255104	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-441-1	NZ_KB947813.1	+	267269	267301	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-466-1	NZ_KB949541.1	+	252270	252302	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-488-1	NZ_KB946960.1	+	771616	771648	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-437-1	NZ_KB947662.1	-	210708	210676	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-442-1	NZ_KB947831.1	+	264751	264783	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-447-1	NZ_KB947952.1	+	67274	67306	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-452-1	NZ_KB948120.1	-	309201	309169	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-453-1	NZ_KB948121.1	+	719806	719838	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-457-1	NZ_KB948267.1	+	336995	337027	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-462-1	NZ_KB949451.1	+	44122	44154	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-471-1	NZ_KB949770.1	-	251932	251900	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-430-1	NZ_KB947513.1	+	43998	44030	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-465-1	NZ_KB949525.1	+	67931	67963	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-473-1	NZ_KB949826.1	-	237195	237163	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-470-1	NZ_KB949740.1	+	704139	704171	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-497-1	NZ_KE136460.1	-	106574	106542	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-188-1	NZ_KB946782.1	-	205906	205874	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-474-1	NZ_KB949842.1	+	63724	63756	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-468-1	NZ_KB949632.1	-	176857	176825	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-496-1	NZ_KE136534.1	+	253712	253744	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-497-2	NZ_KE136554.1	-	152402	152370	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-495-1	NZ_KE136411.1	-	134559	134527	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-496-2	NZ_KE136427.1	+	256865	256897	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-503-1	NZ_KE150233.1	+	502299	502331	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-524-1	NZ_KE352068.1	-	7536	7504	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-502-1	NZ_KE150065.1	+	429121	429153	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-509-1	NZ_KE352399.1	+	52532	52564	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-525-1	NZ_KE351986.1	-	34152	34120	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-531-1	NZ_GL455151.1	-	99216	99184	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-427-1	NZ_KB932760.1	-	105635	105603	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-343-1	NZ_JH811220.1	-	379	347	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-327-1	NC_021994.1	+	687115	687147	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-515-1	NZ_JH808280.1	-	7536	7504	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-321-1	NZ_JH814453.1	-	7536	7504	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-348-1	NZ_JH810749.1	-	7536	7504	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-313-1	NZ_KN985989.1	-	2662842	2662810	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-504-1	NZ_JH636590.1	-	73897	73865	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-499-1	NZ_JH691958.1	-	1923172	1923140	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Emu-4-1	NZ_AFWZ01000014.1	-	14870	14838	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Emu-1-1	NZ_KB946218.1	-	1566975	1566943	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Emu-3-1	NC_022878.1	+	768682	768714	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Emu-2-1	NZ_JDF01000010.1	-	62363	62331	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Cga-1-1	NZ_JQLU01000005.1	+	2105866	2105898	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1481	JXWR01031192.1	-	596	564	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbr-1-1	NZ_JOKA01000068.1	+	76768	76800	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbr-1-2	NZ_BBOW01000057.1	+	73685	73717	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbr-1-3	NZ_JXUE01000015.1	-	385418	385386	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbr-1-4	NZ_JXCD01000008.1	-	3214	3182	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbr-1-5	NZ_LBHR01000024.1	-	33108	33076	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbr-5-1	NC_020819.1	+	528420	528452	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → sortase_fam (TIGR01076) Sortase_A (cd0610)
Lbr-6-1	NC_008497.1	+	531348	531380	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbr-3-1	NZ_KI271225.1	+	5864	5896	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → sortase_fam (TIGR01076) Sortase_A (cd0610)
Lbr-2-1	NZ_JAGR01000001.1	-	737769	737737	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbr-1-6	NZ_JXUG01000016.1	-	41734	41702	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lbr-4-1	NZ_AUTD01000009.1	-	11717	11685	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lna-2-1	NZ_BAOT01000056.1	-	26005	25972	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1482	2204712971	-	160	127	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1483	2157898307	+	162	195	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lsp-15-1	NZ_JZCR01000012.1	-	34731	34698	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lma-3-2	NZ_BACP01000068.1	+	42656	42688	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lma-3-1	NZ_AKKT01000010.1	+	8614	8646	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Cfu-1-1	NZ_JQLL01000001.1	-	1384361	1384329	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Cma-5-1	NZ_AGNS01000026.1	+	96248	96281	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Cma-3-1	NC_019425.2	-	2842409	2842376	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Cma-2-1	NZ_JQMX01000001.1	+	3115749	3115782	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ema-2-1	NZ_KB946249.1	-	604276	604244	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eav-1-1	NZ_JUZB01000046.1	+	16390	16422	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Era-1-1	NZ_KB946257.1	+	170182	170214	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ehi-1-1	NZ_JUPQ01000184.1	+	9015	9047	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eav-2-1	NZ_KE136363.1	+	39237	39269	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eav-2-2	NZ_KE136509.1	-	615844	615812	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1484	2205839497	-	267	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1485	2158422988	-	267	235	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ehi-2-1	NZ_KB946231.1	-	1167763	1167731	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-406-1	NZ_KB932610.1	-	340657	340625	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ehi-2-2	NC_018081.1	+	1570676	1570708	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ehi-1-2	NZ_JMIG01000005.1	+	48625	48657	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Edu-2-1	NZ_KE136383.1	+	49835	49867	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Edu-2-2	NZ_KE136516.1	+	45291	45323	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Edu-1-1	NZ_CP012384.1	-	2493264	2493232	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Edu-1-2	NZ_CP012366.1	-	697844	697812	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Edu-4-1	NZ_AOSM01000013.1	+	23749	23781	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1486	ACOFG987_F36MELC02HSZ0T	+	32	64	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Evi-1-1	NZ_KB946287.1	-	791418	791386	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-172-1	NZ_AJET01000006.1	+	629973	630005	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-12-1	NZ_JWBQ01000066.1	+	72115	72147	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-1	NZ_JVQP01000016.1	+	72248	72280	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-2	NZ_JVOA01000123.1	+	50507	50539	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-3	NZ_JVOF01000024.1	-	136699	136667	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-4	NZ_JVZS01000075.1	-	80355	80323	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-5	NZ_JVQT01000017.1	-	155630	155598	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-6	NZ_JVQS01000014.1	+	72248	72280	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-7	NZ_JVIK01000038.1	-	75811	75779	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-8	NZ_JVBG01000102.1	-	20244	20212	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-9	NZ_JVPG01000107.1	-	20252	20220	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-10	NZ_JVIY01000046.1	-	20244	20212	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-13-1	NZ_JVOE01000070.1	+	50458	50490	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-11	NZ_JVQO01000033.1	-	155729	155697	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-12	NZ_JVQF01000009.1	+	50546	50578	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-13	NZ_JVBD01000057.1	+	50551	50583	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-14	NZ_JVPS01000092.1	+	50507	50539	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-15	NZ_JUZT01000074.1	+	50507	50539	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-16	NZ_JVOB01000025.1	+	50497	50529	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-17	NZ_JVOC01000134.1	-	75987	75955	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-18	NZ_JVAM01000128.1	-	78901	78869	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-19	NZ_JUWK01000014.1	+	66857	66889	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-20	NZ_JVJB01000035.1	-	75865	75833	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-21	NZ_JUMK01000040.1	+	72186	72218	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-22	NZ_JUOO01000146.1	-	20246	20214	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-23	NZ_JUVP01000129.1	-	75833	75801	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-567-1	NZ_ACOX02000001.1	-	165398	165366	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-559-1	NZ_ADKN01000064.1	+	5576	5608	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-278-1	NZ_AYKU01000027.1	-	144500	144468	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-22-1	NZ_AYLU01000042.1	+	97278	97310	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-1-24	NZ_JPTY01000024.1	+	98124	98156	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-549-1	NC_018221.1	+	1022628	1022660	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-312-1	NC_019770.1	+	1028524	1028556	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-19-1	NZ_CP008816.1	+	231325	231357	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-560-1	NZ_GG739846.1	-	421383	421351	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-562-1	NZ_GG670358.1	-	1399663	1399631	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-551-1	NZ_GG692891.1	+	121192	121224	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-18-2	NZ_GG668755.1	-	1351023	1350991	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-557-1	NZ_GG692929.1	-	1368435	1368403	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-573-1	NZ_GG688434.1	-	1376486	1376454	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-553-1	NZ_GG692670.1	-	1446803	1446771	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-556-1	NZ_GG692696.1	-	38543	38511	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-552-1	NZ_GG692683.1	-	1370149	1370117	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-289-1	NZ_GL454506.1	-	3215	3183	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → DUF916 (pfam06030)DUF3324 (pfam11797) →
Efa-300-1	NZ_GL454537.1	+	136485	136517	hypo → hypo → NagC (COG1940)ROK_glcA_fam (TIGR00744) → CsbD (pfam05532) →
Efa-28-1	NZ_GL455718.1	+	15340	15372	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-285-1	NZ_GL456486.1	+	15327	15359	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-27-1	NZ_GL455808.1	+	15343	15375	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-294-1	NZ_GL456782.1	-	70795	70763	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-290-1	NZ_GL455121.1	+	15383	15415	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-572-1	NZ_GL454430.1	-	79041	79009	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → DUF916 (pfam06030)DUF3324 (pfam11797) →
Efa-571-1	NZ_GL455597.1	+	15307	15339	hypo → hypo → NagC (COG1940)ROK_glcA_fam (TIGR00744) → CsbD (pfam05532)YtxH (pfam12732) →
Efa-303-1	NZ_GL454593.1	+	75214	75246	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-288-1	NZ_GL454737.1	-	70823	70791	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-291-1	NZ_GL455457.1	-	99932	99900	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-286-1	NZ_GL454210.1	+	100704	100736	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-287-1	NZ_GL454392.1	-	79063	79031	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-252-1	NZ_KI913024.1	+	162848	162880	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-245-1	NZ_KI912990.1	+	249634	249666	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-258-1	NZ_KI913061.1	+	883273	883305	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-241-1	NZ_KI912966.1	+	125732	125764	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-254-1	NZ_KI913040.1	+	118788	118820	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-243-1	NZ_KI912979.1	+	120525	120557	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-240-1	NZ_KI912960.1	+	882120	882152	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-263-1	NZ_KI913093.1	+	1162405	1162437	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-239-1	NZ_KI912956.1	+	166079	166111	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-250-1	NZ_KI913015.1	+	134778	134810	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-262-1	NZ_KI913086.1	+	243014	243046	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-249-1	NZ_KI913011.1	+	1118035	1118067	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-238-1	NZ_KI912939.1	+	893011	893043	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-242-1	NZ_KI912974.1	+	120793	120825	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-255-1	NZ_KI913051.1	+	1065840	1065872	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-260-1	NZ_KI913083.1	-	1336694	1336662	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-259-1	NZ_KI913069.1	+	815731	815763	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-228-1	NZ_KB944632.1	+	125914	125946	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-217-1	NZ_KB944671.1	+	124502	124534	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-214-1	NZ_KB944586.1	+	118308	118340	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-215-1	NZ_KB944615.1	+	121371	121403	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-222-1	NZ_KB944766.1	+	142847	142879	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-68-1	NZ_KB932378.1	+	125977	126009	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-20-1	NZ_KB944642.1	+	125027	125059	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-195-1	NZ_KB945025.1	+	125183	125215	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-203-1	NZ_KB945029.1	+	168632	168664	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-216-1	NZ_KB944663.1	+	122100	122132	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-14-1	NZ_KB944873.1	+	123793	123825	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-200-1	NZ_KB944979.1	+	120581	120613	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-198-1	NZ_KB945018.1	+	120521	120553	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-221-1	NZ_KB944759.1	+	143579	143611	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → DUF916 (pfam06030)DUF3324 (pfam11797)
Efa-196-1	NZ_KB944971.1	+	149512	149544	hypo → RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-16-1	NZ_KB947429.1	+	157881	157913	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-67-1	NZ_KB932366.1	+	139890	139922	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-162-1	NZ_KB946671.1	+	158011	158043	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-152-1	NZ_KB946409.1	+	160128	160160	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-218-1	NZ_KB944674.1	+	123199	123231	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-165-1	NZ_KB947327.1	+	97950	97982	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-179-1	NZ_KB947400.1	+	122702	122734	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-174-1	NZ_KB947439.1	+	149395	149427	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-176-1	NZ_KB947300.1	+	865457	865489	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-167-1	NZ_KB947338.1	+	123113	123145	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-177-1	NZ_KB947421.1	+	121290	121322	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-175-1	NZ_KB947485.1	+	846302	846334	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-17-1	NZ_KB947435.1	+	136478	136510	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-187-1	NZ_KB947334.1	+	785472	785504	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-171-1	NZ_KB947466.1	+	150408	150440	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-168-1	NZ_KB947308.1	+	122445	122477	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-18-1	NZ_KB947320.1	+	123023	123055	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-169-1	NZ_KB947506.1	+	123365	123397	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-467-1	NZ_KB949610.1	+	123805	123837	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-145-1	NZ_KB949669.1	+	125345	125377	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-23-1	NZ_KE351093.1	+	66098	66130	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-10-1	NZ_KE351720.1	+	133898	133930	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-9-1	NZ_KE350863.1	+	133929	133961	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-311-1	NZ_KE352562.1	-	571410	571378	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-523-1	NZ_KE352305.1	+	15319	15351	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-308-1	NZ_KE352699.1	+	133744	133776	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-3-1	NZ_KE350832.1	+	97516	97548	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-11-1	NZ_KE351747.1	+	101809	101841	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-561-1	NZ_GG739749.1	+	72311	72343	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-104-1	NZ_KB932565.1	+	120769	120801	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-247-1	NZ_KI913001.1	+	251023	251055	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-268-1	NZ_AYLV01000014.1	+	15346	15378	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-25	NZ_JTKW01000031.1	-	79072	79040	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-26	NZ_JTKT01000016.1	-	79072	79040	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-27	NZ_JUPP01000126.1	-	23368	23336	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1487	AEQT01000844.1	+	5466	5498	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-28	NZ_JPTZ01000018.1	+	98763	98795	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-30-1	NZ_AWPI01000053.1	-	23340	23308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-193-1	NZ_AOPW01000055.1	-	6414	6382	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-29	NZ_LAEB01000001.1	+	120172	120204	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-281-1	NZ_AFH01000009.1	+	5589	5621	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-273-1	NZ_AGVN01000048.1	-	71733	71701	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-30	NZ_JWAW01000015.1	-	23381	23349	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-31	NZ_JWBU01000140.1	-	3760	3728	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-1-32	NZ_JVYW01000023.1	-	39746	39714	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-33	NZ_JVTX01000024.1	-	139814	139782	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-34	NZ_JVVS01000038.1	+	50558	50590	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-35	NZ_JVSW01000024.1	+	67849	67881	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-36	NZ_JVTK01000025.1	-	139814	139782	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-37	NZ_JVZM01000052.1	+	50559	50591	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-38	NZ_JVTP01000163.1	-	139757	139725	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-39	NZ_JVXY01000154.1	+	72669	72701	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-40	NZ_JVUK01000009.1	+	50550	50582	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-41	NZ_JVCH01000106.1	+	50558	50590	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-42	NZ_JVSV01000004.1	-	139638	139606	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-43	NZ_JVTG01000037.1	+	100342	100374	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-44	NZ_JVKC01000009.1	+	66961	66993	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-45	NZ_JVGB01000067.1	-	41207	41175	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-46	NZ_JVAI01000107.1	+	72273	72305	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-47	NZ_JVPV01000250.1	+	3341	3373	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-48	NZ_JVXC01000110.1	+	72810	72842	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-49	NZ_JVQY01000105.1	-	40275	40243	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-50	NZ_JVPJ01000031.1	-	150815	150783	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-51	NZ_JVBW01000037.1	+	66956	66988	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-52	NZ_JVBV01000042.1	+	72347	72379	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-53	NZ_JVHL01000037.1	-	260046	260014	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-54	NZ_JVOQ01000069.1	-	77612	77580	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-55	NZ_JVOG01000063.1	-	40276	40244	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-56	NZ_JVNY01000006.1	+	50558	50590	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-57	NZ_JVID01000037.1	+	89220	89252	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-58	NZ_JUJ01000069.1	-	3396	3364	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-59	NZ_JUXT01000064.1	-	3510	3478	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-60	NZ_JUQC01000149.1	-	23381	23349	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-61	NZ_JULA01000068.1	-	39749	39717	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-62	NZ_JUNN01000112.1	+	8486	8518	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-63	NZ_JUPR01000265.1	-	45791	45759	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-64	NZ_JUUM01000251.1	+	72669	72701	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-65	NZ_JUXC01000167.1	-	17001	16969	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-66	NZ_JUOP01000166.1	+	50540	50572	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-67	NZ_JUVA01000209.1	+	4910	4942	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-68	NZ_JUMJ01000040.1	+	50550	50582	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-69	NZ_JUVH01000090.1	+	50547	50579	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-70	NZ_JUWE01000037.1	-	23379	23347	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-71	NZ_JVAN01000023.1	-	19069	19037	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-72	NZ_JUNQ01000033.1	-	139778	139746	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-73	NZ_JUNL01000200.1	+	1215	1247	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-7-1	NZ_ASWX01000016.1	-	74824	74792	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-267-1	NZ_AYKL01000013.1	-	139637	139605	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-74	NZ_JPWN01000003.1	-	424614	424582	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-271-1	NZ_AYND01000026.1	-	83291	83259	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-275-1	NZ_AYLN01000020.1	-	38399	38367	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-279-1	NZ_AYOK01000014.1	-	39604	39572	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-280-1	NZ_AYOL01000011.1	+	15280	15312	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-266-1	NZ_AYKK01000037.1	+	15346	15378	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-276-1	NZ_AYKM01000017.1	+	50490	50522	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-274-1	NZ_ANMP01000017.1	+	15298	15330	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-309-3	NC_004668.1	+	1142020	1142052	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-558-1	NC_017316.1	+	990713	990745	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-29-1	NZ_CP004081.1	+	1156388	1156420	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-550-1	NZ_GG688629.1	+	120120	120152	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-547-1	NZ_GG670383.1	+	188194	188226	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-565-1	NZ_GG670369.1	+	117194	117226	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-555-1	NZ_GG692656.1	-	743973	743941	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-570-1	NZ_GG669017.1	-	1360589	1360557	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-564-1	NZ_GG692851.1	-	1436735	1436703	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-554-1	NZ_GG668819.1	+	119410	119442	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-546-1	NZ_GG692906.1	+	759872	759904	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-563-1	NZ_GG688647.1	+	124828	124860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-566-1	NZ_GG698878.1	+	119116	119148	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-548-1	NZ_GG688666.1	+	121000	121032	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-13-1	NZ_KK640475.1	+	209811	209843	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-307-1	NZ_GL454691.1	-	3308	3276	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-302-1	NZ_GL454579.1	+	99322	99354	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-569-1	NZ_GL455684.1	+	72259	72291	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-306-1	NZ_GL476280.1	-	39719	39687	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-305-1	NZ_GL457030.1	+	98133	98165	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-296-1	NZ_GL456521.1	+	98921	98953	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-301-1	NZ_GL457177.1	+	98525	98557	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-292-1	NZ_GL454300.1	-	6431	6399	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-293-1	NZ_GL454272.1	+	99142	99174	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-298-1	NZ_GL457134.1	-	6431	6399	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-304-1	NZ_GL454064.1	-	6435	6403	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-299-1	NZ_GL455510.1	-	6363	6331	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-295-1	NZ_GL456440.1	+	97150	97182	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-297-1	NZ_GL454840.1	+	73694	73726	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-12-1	NZ_JH805581.1	-	73970	73938	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-282-1	NZ_JH804753.1	-	81850	81818	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-269-1	NZ_KI518257.1	+	122898	122930	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-24-1	NZ_KI518253.1	+	125179	125211	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-25-1	NZ_KI518248.1	+	118972	119004	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-257-1	NZ_KI913060.1	+	999492	999524	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-261-1	NZ_KI913085.1	+	715722	715754	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-251-1	NZ_KI913020.1	+	730724	730756	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-244-1	NZ_KI912988.1	+	1001606	1001638	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-248-1	NZ_KI913005.1	+	642798	642830	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-253-1	NZ_KI913031.1	+	861627	861659	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-237-1	NZ_KI912926.1	+	1097807	1097839	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-256-1	NZ_KI913055.1	+	119066	119098	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-246-1	NZ_KI912997.1	+	996595	996627	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-264-1	NZ_KI913096.1	+	119261	119293	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-50-1	NZ_KB932381.1	+	121925	121957	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-213-1	NZ_KB944581.1	+	247558	247590	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-232-1	NZ_KB944838.1	+	119466	119498	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-56-1	NZ_KB932331.1	+	160762	160794	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-15-1	NZ_KB944590.1	+	122729	122761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-206-1	NZ_KB944678.1	+	122933	122965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-231-1	NZ_KB944545.1	+	233956	233988	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-49-1	NZ_KB932337.1	+	157468	157500	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-63-1	NZ_KB932363.1	+	104909	104941	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-52-1	NZ_KB932317.1	-	1903453	1903421	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-229-1	NZ_KB944658.1	+	124147	124179	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-66-1	NZ_KB932344.1	+	120296	120328	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-233-1	NZ_KB944807.1	+	190819	190851	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-224-1	NZ_KB944819.1	+	123718	123750	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-202-1	NZ_KB945035.1	+	122741	122773	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-201-1	NZ_KB933473.1	+	116902	116934	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-73-1	NZ_KB932398.1	-	1315435	1315403	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-235-1	NZ_KB944800.1	+	125536	125568	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-207-1	NZ_KB944930.1	+	854300	854332	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-70-1	NZ_KB932385.1	+	120253	120285	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-210-1	NZ_KB944537.1	+	641238	641270	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-62-1	NZ_KB932405.1	-	1393944	1393912	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-227-1	NZ_KB944601.1	+	125725	125757	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-95-1	NZ_KB932427.1	+	123804	123836	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-205-1	NZ_KB944666.1	+	1303327	1303359	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-92-1	NZ_KB932581.1	+	230841	230873	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-225-1	NZ_KB944826.1	+	121386	121418	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-54-1	NZ_KB932324.1	-	1596841	1596809	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-197-1	NZ_KB945039.1	+	117789	117821	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-65-1	NZ_KB945185.1	+	122889	122921	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-219-1	NZ_KB944718.1	+	119546	119578	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-71-1	NZ_KB932389.1	+	120253	120285	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-61-1	NZ_KB945241.1	+	125221	125253	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-209-1	NZ_KB944833.1	+	125453	125485	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-57-1	NZ_KB932410.1	+	121919	121951	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-77-1	NZ_KB932431.1	+	683611	683643	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-184-1	NZ_KB946767.1	+	124364	124396	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-99-1	NZ_KB932453.1	+	124004	124036	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-234-1	NZ_KB944754.1	+	837249	837281	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-86-1	NZ_KB932513.1	+	681664	681696	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-93-1	NZ_KB932585.1	+	229409	229441	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-75-1	NZ_KB932562.1	+	663647	663679	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-51-1	NZ_KB932320.1	-	1554080	1554048	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-108-1	NZ_KB932479.1	+	121580	121612	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-64-1	NZ_KB932347.1	-	696492	696460	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-103-1	NZ_KB932539.1	+	121716	121748	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-69-1	NZ_KB932372.1	-	1782054	1782022	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-156-1	NZ_KB946490.1	+	123693	123725	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-59-1	NZ_KB932417.1	+	122720	122752	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-78-1	NZ_KB932437.1	+	2252823	2252855	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-181-1	NZ_KB947238.1	+	125685	125717	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-83-1	NZ_KB932490.1	+	123557	123589	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-90-1	NZ_KB932574.1	+	123230	123262	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-48-1	NZ_KB932356.1	+	156551	156583	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-230-1	NZ_KB944688.1	+	122685	122717	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-100-1	NZ_KB932473.1	+	698382	698414	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-211-1	NZ_KB944694.1	+	122838	122870	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-105-1	NZ_KB932593.1	+	185323	185355	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-85-1	NZ_KB932506.1	+	121940	121972	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-153-1	NZ_KB946414.1	+	120628	120660	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-97-1	NZ_KB932559.1	+	123243	123275	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-158-1	NZ_KB946508.1	+	125411	125443	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-55-1	NZ_KB945106.1	+	124044	124076	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-182-1	NZ_KB946719.1	+	944180	944212	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-212-1	NZ_KB944552.1	+	121578	121610	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-72-1	NZ_KB932393.1	-	1371754	1371722	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-58-1	NZ_KB932415.1	+	909832	909864	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-185-1	NZ_KB947273.1	+	125433	125465	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-60-1	NZ_KB932422.1	-	1981852	1981820	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-226-1	NZ_KB944566.1	+	121785	121817	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-199-1	NZ_KB945052.1	+	119630	119662	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-79-1	NZ_KB932442.1	+	121860	121892	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-102-1	NZ_KB932532.1	+	118858	118890	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-80-1	NZ_KB932457.1	+	123784	123816	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-74-1	NZ_KB932469.1	+	697454	697486	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-84-1	NZ_KB932497.1	+	124103	124135	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-101-1	NZ_KB932518.1	+	685526	685558	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-180-1	NZ_KB947112.1	+	654286	654318	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-88-1	NZ_KB932527.1	+	119530	119562	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-220-1	NZ_KB944728.1	+	122601	122633	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-91-1	NZ_KB932577.1	+	229782	229814	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-154-1	NZ_KB946433.1	+	119307	119339	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-161-1	NZ_KB946666.1	+	115624	115656	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-163-1	NZ_KB946616.1	+	125518	125550	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-53-1	NZ_KB932336.1	+	887741	887773	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-98-1	NZ_KB932447.1	+	118980	119012	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-107-1	NZ_KB932601.1	+	230184	230216	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-157-1	NZ_KB946499.1	+	125503	125535	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-160-1	NZ_KB946551.1	+	122102	122134	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-94-1	NZ_KB932589.1	+	223552	223584	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-186-1	NZ_KB947205.1	+	126658	126690	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-123-1	NZ_KB948613.1	+	692248	692280	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-109-1	NZ_KB932435.1	+	903029	903061	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-89-1	NZ_KB932545.1	+	118833	118865	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-76-1	NZ_KB932553.1	+	688587	688619	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-106-1	NZ_KB932597.1	+	227160	227192	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-178-1	NZ_KB947149.1	+	1211418	1211450	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-170-1	NZ_KB947405.1	+	113537	113569	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-21-1	NZ_KB944862.1	+	135281	135313	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-208-1	NZ_KB944938.1	+	119215	119247	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-151-1	NZ_KB946400.1	+	121933	121965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-144-1	NZ_KB946638.1	+	122019	122051	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-166-1	NZ_KB947183.1	+	852047	852079	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-173-1	NZ_KB947341.1	+	861817	861849	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-118-1	NZ_KB948491.1	+	118961	118993	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-81-1	NZ_KB932465.1	+	122091	122123	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-87-1	NZ_KB932522.1	+	707656	707688	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-96-1	NZ_KB932550.1	+	119174	119206	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-147-1	NZ_KB946069.1	+	834258	834290	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-148-1	NZ_KB946181.1	+	121938	121970	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-192-1	NZ_KB947132.1	+	903557	903589	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-164-1	NZ_KB946584.1	+	846944	846976	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-183-1	NZ_KB947346.1	+	912443	912475	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-117-1	NZ_KB948452.1	+	121982	122014	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-121-1	NZ_KB948631.1	+	118986	119018	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-139-1	NZ_KB949292.1	+	118895	118927	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-159-1	NZ_KB946519.1	+	746880	746912	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-111-1	NZ_KB948306.1	+	692749	692781	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-113-1	NZ_KB948374.1	+	121434	121466	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-134-1	NZ_KB949098.1	+	679266	679298	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-115-1	NZ_KB948411.1	+	124207	124239	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-128-1	NZ_KB948910.1	+	125113	125145	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-142-1	NZ_KB949380.1	+	121687	121719	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-194-1	NZ_KB947266.1	+	125568	125600	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-116-1	NZ_KB948432.1	+	119775	119807	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-124-1	NZ_KB948773.1	+	122070	122102	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-129-1	NZ_KB948924.1	+	681265	681297	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-189-1	NZ_KB947291.1	+	120577	120609	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-146-1	NZ_KB949772.1	+	1111167	1111199	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-110-1	NZ_KB948281.1	+	119213	119245	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-120-1	NZ_KB948590.1	+	120205	120237	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-190-1	NZ_KB947168.1	+	124005	124037	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-204-1	NZ_KB947484.1	+	121690	121722	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-137-1	NZ_KB949231.1	+	119523	119555	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-125-1	NZ_KB948803.1	+	121909	121941	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-133-1	NZ_KB949059.1	+	676773	676805	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-130-1	NZ_KB948962.1	+	121896	121928	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-135-1	NZ_KB949160.1	+	121821	121853	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-119-1	NZ_KB948517.1	+	121976	122008	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-143-1	NZ_KB948681.1	+	121876	121908	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-122-1	NZ_KB948722.1	+	687418	687450	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-126-1	NZ_KB948846.1	+	119055	119087	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-127-1	NZ_KB948878.1	+	118805	118837	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-141-1	NZ_KB949363.1	+	123019	123051	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-131-1	NZ_KB948990.1	+	122095	122127	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-132-1	NZ_KB949021.1	+	123650	123682	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-136-1	NZ_KB949171.1	+	652090	652122	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-112-1	NZ_KB948356.1	+	692356	692388	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-140-1	NZ_KB949324.1	+	694227	694259	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-236-1	NZ_KB948740.1	+	118896	118928	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-138-1	NZ_KB949265.1	+	686455	686487	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-309-1	NZ_KE136528.1	+	119156	119188	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-309-2	NZ_KE136402.1	-	2324068	2324036	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-283-1	NZ_KE351799.1	-	6437	6405	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-26-1	NZ_KE351073.1	+	72178	72210	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-5-1	NZ_KE351325.1	+	7087	7119	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-2-1	NZ_KE350972.1	+	65344	65376	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo → DUF916 (pfam06030)DUF3324 (pfam11797)
Efa-310-1	NZ_KE352642.1	+	15337	15369	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-284-1	NZ_KE352762.1	+	15329	15361	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-265-1	NZ_KE351588.1	-	236352	236320	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-6-1	NZ_KE351218.1	+	7091	7123	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-270-1	NZ_KE350323.1	-	128689	128657	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-272-1	NZ_KE352792.1	+	15345	15377	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-47-1	NZ_KL584693.1	-	424542	424510	RNA →	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Efa-277-1	NZ_AYOJ01000045.1	+	50557	50589	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-75	NZ_JSES01000004.1	-	229328	229296	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-76	NZ_JTKS01000008.1	+	98901	98933	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-77	NZ_JTKU01000015.1	-	557832	557800	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-78	NZ_JTKX01000056.1	+	101015	101047	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-79	NZ_JTKV01000020.1	-	229146	229114	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-80	NZ_JQHD01000026.1	-	3289	3257	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-81	NZ_JWAR01000070.1	-	87014	86982	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-82	NZ_JVAD01000032.1	-	86836	86804	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-83	NZ_JVDH01000056.1	-	120626	120594	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-84	NZ_JUXV01000036.1	-	86836	86804	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-85	NZ_JUXZ01000087.1	+	50554	50586	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-86	NZ_JUXL01000154.1	+	5045	5077	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-1-87	NZ_JUYS01000097.1	+	15659	15691	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-568-1	NZ_GG668922.1	+	118017	118049	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-38-1	NZ_JH805817.1	+	98302	98334	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-33-1	NZ_JH806227.1	+	15338	15370	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-32-1	NZ_JH806069.1	+	98267	98299	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-35-1	NZ_JH806464.1	-	198218	198186	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-34-1	NZ_JH806329.1	+	72149	72181	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-37-1	NZ_JH805939.1	-	198203	198171	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-42-1	NZ_JH805527.1	+	75536	75568	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-31-1	NZ_JH805886.1	+	72171	72203	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-36-1	NZ_JH806144.1	-	198240	198208	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-43-1	NZ_JH805255.1	-	198654	198622	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-46-1	NZ_JH804975.1	+	15342	15374	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-41-1	NZ_JH805339.1	+	72173	72205	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-44-1	NZ_JH805118.1	+	15343	15375	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-39-1	NZ_JH805694.1	-	198161	198129	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-45-1	NZ_JH804884.1	-	198224	198192	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-223-1	NZ_KB944788.1	+	121130	121162	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-150-1	NZ_KB946369.1	+	121423	121455	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-149-1	NZ_KB946341.1	+	120776	120808	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-114-1	NZ_KB948391.1	+	123030	123062	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-155-1	NZ_KB946441.1	+	121214	121246	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-40-1	NZ_JH805440.1	-	198081	198049	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-82-1	NZ_KB932483.1	+	121271	121303	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Csp-3-1	NZ_JTLM01000039.1	+	16014	16047	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eca-1-1	NZ_KB946333.1	+	919506	919538	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Emo-1-1	NZ_KB946318.1	+	836233	836265	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eha-1-1	NZ_KB946315.1	+	715011	715043	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Esp-17-1	NZ_AYPQ01000003.1	-	139381	139349	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Edi-1-1	NZ_KE136354.1	-	1524939	1524907	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lap-2-1	NZ_BAMM01000001.1	+	55628	55660	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1488	AglaG_GBVDVL01EDQX8	+	207	239	RNA →
Ega-1-1	NZ_JMGP01000013.1	+	62327	62359	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ega-2-1	NZ_GG670288.1	+	67876	67908	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
Esa-1-1	NZ_JH376940.1	+	68614	68646	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ega-1-2	NZ_JNLR01000003.1	-	2516883	2516851	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Eco-1-1	NZ_KB890286.1	+	27222	27254	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lha-3-1	NZ_BAML01000008.1	-	24487	24455	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
Leq-1-1	NZ_AWWH01000135.1	+	28867	28900	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Leq-2-1	NZ_BAMI01000008.1	-	21982	21949	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1489	2204882122	-	2442	2410	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1490	2158238682	+	11762	11794	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bok-2-1	NZ_LILD01000001.1	+	243048	243079	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bha-1-1	NC_002570.2	-	3899644	3899613	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Wko-2-1	NC_015759.1	-	274266	274233	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Wko-1-1	NZ_AKGG01000014.1	-	93148	93115	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bma-8-1	NZ_CDP01000002.1	-	333009	332973	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Lactamase_B (smart00849)PhnP (COG1235) → PRK00103 (PRK00103)SPOUT_MTase (pfam02590) →
env-1491	AKYZ01003788.1	-	1483	1450	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1492	AKZA01003178.1	+	2474	2507	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1493	SRS011586_C3401226	-	110	77	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1494	SRS017521_C2775917	+	102	135	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-7-1	NZ_AKCB01000001.1	-	1308492	1308459	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-5-1	NZ_GL636577.1	+	412437	412470	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1495	BAAV01014627.1	-	242	209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1496	scaffold83146_5_MH0053	-	142	109	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1497	scaffold10346_4_MH0082	-	929	896	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1498	scaffold21466_3_MH0083	-	331	298	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1499	scaffold30922_4_O2.UC-12	+	780	813	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1500	scaffold47149_2_V1.CD-6	+	2716	2749	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1501	scaffold42088_2_V1.UC-14	-	149	116	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1502	4491405_3_NODE.38711	-	355	322	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1503	NLM004_scaffold5032_16	+	1211	1244	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1504	SRS011134_Baylor_scaffold_20481	+	1045	1078	RNA →
env-1505	SRS014683_WUGC_scaffold_50673	+	1869	1902	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1506	SRS019582_C3007814	+	421	454	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1507	SRS049712_C15539391	-	84	51	RNA →
env-1508	4448807_3_Contig4303	+	447	480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1509	scaffold112155_1_MH0012	-	1337	1304	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cmi-1-1	NZ_ACCK01000449.1	-	23456	23423	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1510	4448819_3_Contig3697	-	316	283	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
CSt-1-1	NZ_HG005284.1	-	229433	229400	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1511	SRS019601_C2033027	+	1675	1708	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1512	2211711892	+	393	426	RNA →
env-1513	2156523182	+	393	426	RNA → hypo →
env-1514	TB_AS07.7DRAFT_10000101	-	48063	48032	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → spore_YhcN_YlaJ (TIGR02898) →
Bsp-100-1	NZ_JHXX01000001.1	-	753957	753936	RNA → Acetyltransf_1 (pfam00583)Acetyltransf_7 (pfam13508) → CAT (smart01059)CAT (pfam00302) →
Lmo-37-1	NZ_LHRX01000005.1	+	41811	41840	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-74-1	NZ_AVQQ01000001.1	+	10648	10677	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-15-1	NZ_AATL02000007.1	+	41815	41844	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-75-1	NZ_AVQM01000001.1	-	155185	155156	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-76-1	NZ_AVQN01000027.1	+	41830	41859	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-77-1	NZ_AVQO01000004.1	+	11588	11617	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-78-1	NZ_AVQP01000004.1	+	41830	41859	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-73-1	NC_019556.1	-	2579159	2579130	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-79-1	NZ_CM001159.1	-	2710091	2710062	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-49-1	NZ_KK074009.1	-	101216	101187	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-5-1	NC_012488.1	-	2597658	2597629	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-1-1	NC_017728.1	-	2576506	2576477	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-18-1	NC_018642.1	-	2597808	2597779	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-4-1	NC_018584.1	-	2640176	2640147	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

Lmo-23-1	NC_018585.1	-	2616367	2616338	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-33-9	NC_021825.1	+	457670	457699	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-41-1	NC_021830.1	-	2435601	2435572	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-31-1	NC_002973.6	-	2579689	2579660	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-71-1	NZ_CP007210.1	-	2025111	2025082	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-43-1	NZ_AYPT01000018.1	-	101218	101189	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bsa-1-1	NZ_JYKW01000002.1	-	36424	36391	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsa-1-2	NZ_LATH01000002.1	+	378778	378811	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bpu-5-1	NZ_AUYP01000013.1	-	87433	87400	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsa-3-1	NZ_AUPF01000002.1	-	584661	584628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsa-2-1	NZ_ASJD01000002.1	-	402680	402647	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsa-1-3	NZ_JNBO01000025.1	+	19403	19436	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bae-1-1	NZ_JXRO01000016.1	-	570625	570592	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bal-2-1	NZ_JXAI01000001.1	+	295974	296007	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bal-2-2	NZ_LDPI01000008.1	-	79586	79553	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bpu-7-1	NZ_JH137675.1	+	97459	97492	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bpu-4-1	NZ_AMDH01000015.1	-	232565	232532	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bst-2-1	NZ_APAS01000013.1	-	90146	90113	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bpu-6-1	NZ_AYTK01000014.1	-	90600	90567	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bal-3-1	NZ_ASJC01000004.1	-	121394	121361	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-88-1	NZ_JNIG01000009.1	-	635721	635688	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bzh-1-1	NZ_JOTP01000003.1	+	53546	53579	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-6-1	NZ_AJWW01000012.1	-	126382	126349	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) →
Bal-2-3	NZ_JOVS01000001.1	+	321014	321047	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bpu-2-1	NC_009848.1	-	3327937	3327904	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bpu-1-1	NZ_ABRX01000004.1	-	80659	80626	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) →
Efa-374-1	NZ_KB029918.1	-	250318	250286	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-364-1	NZ_KB029496.1	+	333459	333491	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bam-9-1	NZ_LGYP01000016.1	-	457684	457651	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-18-1	NZ_AUNGO1000003.1	+	391952	391985	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-93-1	NZ_JQKM01000003.1	+	344087	344120	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-16-1	NZ_AUWK01000002.1	+	389923	389956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsu-16-1	NZ_AYTJ01000005.1	-	83015	82982	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-2-1	NZ_AFSU01000009.1	-	134410	134377	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) →
Bve-3-1	NZ_AOFO01000001.1	-	406706	406673	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-15-1	NZ_JCOC01000009.1	+	36110	36143	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-2-1	NC_009725.1	-	3531629	3531596	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-6-1	NC_017912.1	-	3841226	3841193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-8-1	NC_017061.1	-	3845102	3845069	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-20-1	NC_019842.1	-	3566773	3566740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-24-1	NC_020410.1	-	3525764	3525731	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-25-1	NC_022081.1	-	3517148	3517115	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-23-1	NC_022075.1	-	3685897	3685864	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-10-1	NC_022653.1	-	3529867	3529834	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-22-1	NC_022530.1	-	3806043	3806010	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bve-1-2	NZ_CP009679.1	-	3615874	3615841	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bve-5-1	NZ_CP007244.1	-	3565547	3565514	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-31-1	NZ_CP009938.1	-	151413	151380	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →

Bam-17-1	NZ_CP007242.1	-	3385240	3385207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bve-1-3	NZ_CP011347.1	+	385791	385824	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bve-1-4	NZ_CP011686.1	-	3621002	3620969	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Bsp-1-1	NZ_AJST01000001.1	-	3334151	3334118	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) →
Bam-11-1	NZ_AVQH01000023.1	+	411156	411189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) → Tdk (COG1435)PRK04296 (PRK04296) →
Ban-20-1	NZ_LN868937.1	+	267111	267142	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-61-1	NZ_CCNM01000041.1	+	187611	187642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Efa-527-1	NZ_CP006030.1	-	2037832	2037800	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-318-1	NZ_JH813136.1	-	88872	88840	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-477-1	NZ_KB946089.1	+	43740	43772	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bmo-1-1	NZ_JH600279.1	-	659896	659863	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Tdk (COG1435)PRK04296 (PRK04296) →
Egi-1-1	NZ_KB946874.1	-	1793866	1793834	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Bco-2-1	NC_016023.1	+	1562815	1562846	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bco-10-1	NZ_ANAP01000032.1	-	35355	35324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Efa-371-1	NZ_KB029417.1	-	209198	209166	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-387-1	NZ_KB029838.1	+	68007	68039	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-390-1	NZ_KB029937.1	+	330992	331024	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-383-1	NZ_KB029808.1	-	211176	211144	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-415-1	NZ_KB945936.1	+	53148	53180	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-484-1	NZ_KB946737.1	+	59491	59523	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-435-1	NZ_KB947613.1	-	208560	208528	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-486-1	NZ_KB946762.1	-	207793	207761	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-434-1	NZ_KB947589.1	-	209551	209519	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-438-1	NZ_KB947681.1	+	53471	53503	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-431-1	NZ_KB947540.1	+	60225	60257	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-432-1	NZ_KB947550.1	-	209167	209135	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-455-1	NZ_KB948198.1	-	210063	210031	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Efa-410-1	NZ_KB932608.1	-	210349	210317	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sar-2-1	NZ_KK096598.1	-	56203	56174	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sau-56-1	NC_016941.1	-	2116146	2116117	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lre-7-1	NZ_AAPZ02000001.1	+	1432470	1432503	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lre-6-1	NZ_AEAW01000058.1	+	71250	71283	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lre-2-1	NZ_FR854362.1	+	95442	95475	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lre-3-1	NC_021494.1	-	1774307	1774274	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lsa-12-1	NC_007929.1	+	378133	378165	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → hypo →
Lmo-35-1	NZ_CBXR01000002.1	-	221773	221744	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-54-1	NZ_AXDU01000020.1	+	11271	11300	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-51-1	NZ_KK074120.1	-	120845	120816	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Lmo-36-1	NZ_HG813249.1	+	1613739	1613768	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sxy-1-1	NZ_LN554884.1	+	870932	870961	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Sxy-2-1	NZ_AURW01000004.1	-	45188	45159	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →

11.4 Conserved domains

Conserved domains found in protein-coding genes listed in Section 11.3 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one L31-Firmicutes RNA are assigned a color, while others are shown in gray. The symbols ‘d’ and ‘u’ (if any) to the left of the colored domain name indicate whether the

domain occurs upstream or downstream of the RNA motif. Domains marked with lower-case ‘d’ occur (at least once) present downstream of some L31-Firmicutes RNA in the opposite orientation. Domains marked with capital ‘D’ occur downstream and in the same orientation (i.e., a potential *cis*-regulatory arrangement). Domains marked with a ‘u’ occur upstream of the RNA in either orientation. If

the ‘d’/‘u’ symbols are missing, then the domain is downstream and in the same strand. (This mode is used for motifs predicted as *cis*-regulatory.) The num-

cd00156 (2) Signal receiver domain; originally thought to be unique to bacteria (CheY, OmpR, NtrC, and PhoB), now recently identified in eukaryotes ETR1 *Arabidopsis thaliana*; this domain receives the signal from the sensor partner in a two-component systems; contains a phosphoacceptor site that is phosphorylated by histidine kinase homologs; usually found N-terminal to a DNA binding effector domain; forms homodimers

cd00198 (3) Von Willebrand factor type A (vWA) domain was originally found in the blood coagulation protein von Willebrand factor (vWF).

cd00229 (6) SGNH_hydrolase, or GDSL_hydrolase, is a diverse family of lipases and esterases.

cd00293 (2) Usp: Universal stress protein family.

cd00383 (1) DNA-binding effector domain of two-component system response regulators.

cd00430 (5) Type III Pyridoxal 5-phosphate (PLP)-Dependent Enzyme Alanine Racemase.

cd00552 (6) RaiA (“ribosome-associated inhibitor A”, also known as Protein Y (PY), YfiA, and SpotY, is a stress-response protein that binds the ribosomal subunit interface and arrests translation by interfering with aminoacyl-tRNA binding to the ribosomal A site.

cd00616 (1) 3-amino-5-hydroxybenzoic acid synthase family (AHBA_syn).

cd02947 (1) TRX family; composed of two groups: Group I, which includes proteins that exclusively encode a TRX domain; and Group II, which are composed of fusion proteins of TRX and additional domains.

cd03674 (2) Members of the Nudix hydrolase superfamily catalyze the hydrolysis of Nucleoside Diphosphates linked to other moieties, X.

cd04250 (1) AAK_NAGK-C: N-Acetyl-L-glutamate kinase - cyclic (NAGK-C) catalyzes the phosphorylation of the gamma-COOH group of N-acetyl-L-glutamate (NAG) by ATP in the second step of arginine biosynthesis found in some bacteria and photosynthetic organisms using the non-acetylated, cyclic route of ornithine biosynthesis.

cd06165 (10) Sortase domain found in class A sortases.

cd06262 (4) mainly hydrolytic enzymes and related proteins which carry out various biological functions; MBL-fold metallohydrolase domain.

cd06850 (1) The biotinyl-domain or biotin carboxyl carrier protein (BCCP) domain is present in all biotin-dependent enzymes, such as acetyl-CoA carboxylase, pyruvate carboxylase, propionyl-CoA carboxylase, methylcrotonyl-CoA carboxylase, geranyl-CoA carboxylase, oxaloacetate decarboxylase, methylmalonyl-CoA decarboxylase, transcarboxylase and urea amidolyase.

cd06853 (29) This subfamily contains *Escherichia coli* WecA, *Bacillus subtilis* TagO and related proteins.

cd07516 (1) phosphatase, similar to *Escherichia coli* Cof and *Thermotoga maritima* TM0651; belongs to the haloacid dehalogenase-like superfamily.

cd07557 (4) Trimeric dUTP diphosphatases.

cd07733 (3) uncharacterized subgroup which includes *Bacillus subtilis* YycJ and related proteins; MBL-fold metallo hydrolase domain.

cd07743 (1) uncharacterized subgroup of the MBL-fold_metallo-hydrolase superfamily; MBL-fold metallo hydrolase domain.

cd07937 (1) Pyruvate carboxylase and Transcarboxylase 5S, carboxyltransferase domain.

cd10225 (12) MreB and similar proteins.

cd12114 (1) The adenylation domain of nonribosomal peptide synthetases (NRPS), including *Streptoalloteichus tallsomycin* biosynthesis genes.

ber in parentheses after the colored domain name is the number of occurrences in Section 11.3.

cd16015 (20) Lipoteichoic acid synthase like.

cd16344 (1) low molecular weight protein arginine phosphatase.

CHL00117 (1) RNA polymerase beta” subunit; Reviewed

CHL00204 (1) Ycf1; Provisional

COG0002 (2) N-acetyl-gamma-glutamylphosphate reductase [Amino acid transport and metabolism]

COG0009 (5) tRNA A37 threonylcarbamoyladenosine synthetase subunit TsaC/SUA5/YrdC [Translation, ribosomal structure and biogenesis]

COG0021 (12) Transketolase [Carbohydrate transport and metabolism]

COG0025 (6) NhaP-type Na⁺/H⁺ or K⁺/H⁺ antiporter [Inorganic ion transport and metabolism]

COG0035 (3) Uracil phosphoribosyltransferase [Nucleotide transport and metabolism]

COG0053 (1) Divalent metal cation (Fe/Co/Zn/Cd) transporter [Inorganic ion transport and metabolism]

COG0078 (1) Ornithine carbamoyltransferase [Amino acid transport and metabolism]

COG0112 (3) Glycine/serine hydroxymethyltransferase [Amino acid transport and metabolism]

COG0143 (3) Methionyl-tRNA synthetase [Translation, ribosomal structure and biogenesis]

COG0150 (1) Phosphoribosylaminoimidazole (AIR) synthetase [Nucleotide transport and metabolism]

COG0168 (1) Trk-type K⁺ transport system, membrane component [Inorganic ion transport and metabolism]

COG0189 (2) Glutathione synthase/RimK-type ligase, ATP-grasp superfamily [Coenzyme transport and metabolism, Translation, ribosomal structure and biogenesis]

COG0216 (90) Protein chain release factor A [Translation, ribosomal structure and biogenesis]

COG0254 (3) Ribosomal protein L31 [Translation, ribosomal structure and biogenesis]

COG0357 (12) 16S rRNA G527 N7-methylase RsmG (former glucose-inhibited division protein B) [Translation, ribosomal structure and biogenesis]

COG0381 (3) UDP-N-acetylglucosamine 2-epimerase [Cell wall/membrane/envelope biogenesis]

COG0394 (3) Protein-tyrosine-phosphatase [Signal transduction mechanisms]

COG0415 (8) Deoxyribodipyrimidine photolyase [Replication, recombination and repair]

COG0436 (1) Aspartate/methionine/tyrosine aminotransferase [Amino acid transport and metabolism]

COG0439 (1) Biotin carboxylase [Lipid transport and metabolism]

COG0445 (13) tRNA U34 5-carboxymethylaminomethyl modifying enzyme MnmG/GidA [Translation, ribosomal structure and biogenesis]

COG0456 (1) Ribosomal protein S18 acetylase RimI and related acetyltransferases [Translation, ribosomal structure and biogenesis]

COG0461 (3) AAA+-type ATPase, SpoVK/Ycf46/Vps4 family [Cell wall/membrane/envelope biogenesis, Cell cycle control, cell division, chromosome partitioning, Signal transduction mechanisms]

COG0472 (1) UDP-N-acetylmuramyl pentapeptide phosphotransferase/UDP-N-acetylglucosamine-1-phosphate transferase [Cell wall/membrane/envelope biogenesis]

COG0518 (5) Superfamily II DNA and RNA helicase [Replication, recombination and repair]

COG0561 (1) Hydroxymethylpyrimidine pyrophosphatase and other HAD family phosphatases [Coenzyme transport and metabolism, General function prediction only]

COG0590 (43) tRNA(Arg) A34 adenosine deaminase Tada [Translation, ribosomal structure

and biogenesis]

- COG0602** (21) Organic radical activating enzyme [General function prediction only]
COG0653 (8) Preprotein translocase subunit SecA (ATPase, RNA helicase) [Intracellular trafficking, secretion, and vesicular transport]
COG0657 (1) Acetyl esterase/lipase [Lipid transport and metabolism]
COG0674 (3) Pyruvate:ferredoxin oxidoreductase or related 2-oxoacid:ferredoxin oxidoreductase, alpha subunit [Energy production and conversion]
COG0697 (2) Permease of the drug/metabolite transporter (DMT) superfamily [Carbohydrate transport and metabolism, Amino acid transport and metabolism, General function prediction only]
COG0736 (5) Phosphopantetheinyl transferase (holo-ACP synthase) [Lipid transport and metabolism]
COG0745 (1) DNA-binding response regulator, OmpR family, contains REC and winged-helix (wHTH) domain [Signal transduction mechanisms, Transcription]
COG0756 (13) dUTPase [Nucleotide transport and metabolism, Defense mechanisms]
COG0770 (5) UDP-N-acetylmuramyl pentapeptide synthase [Cell wall/membrane/envelope biogenesis]
COG0784 (2) CheY chemotaxis protein or a CheY-like REC (receiver) domain [Signal transduction mechanisms]
COG0840 (1) Methyl-accepting chemotaxis protein [Cell motility, Signal transduction mechanisms]
COG1013 (2) Pyruvate:ferredoxin oxidoreductase or related 2-oxoacid:ferredoxin oxidoreductase, beta subunit [Energy production and conversion]
COG1014 (2) Pyruvate:ferredoxin oxidoreductase or related 2-oxoacid:ferredoxin oxidoreductase, gamma subunit [Energy production and conversion]
COG1145 (2) Ferredoxin [Energy production and conversion]
COG1192 (5) Cellulose biosynthesis protein BcsQ [Cell motility]
COG1235 (12) Phosphoribosyl 1,2-cyclic phosphodiesterase [Inorganic ion transport and metabolism]
COG1275 (1) Tellurite resistance protein TehA and related permeases [Defense mechanisms]
COG1278 (1) Cold shock protein, CspA family [Transcription]
COG1368 (4) Phosphoglycerol transferase MdoB or a related enzyme of AlkP superfamily [Cell wall/membrane/envelope biogenesis]
COG1404 (1) Serine protease, subtilisin family [Posttranslational modification, protein turnover, chaperones]
COG1435 (423) Thymidine kinase [Nucleotide transport and metabolism]
COG1475 (6) Chromosome segregation protein Spo0J, contains ParB-like nuclease domain [Cell cycle control, cell division, chromosome partitioning]
COG1476 (1) DNA-binding transcriptional regulator, XRE-family HTH domain [Transcription]
COG1544 (2) Ribosome-associated translation inhibitor RaiA [Translation, ribosomal structure and biogenesis]
COG1737 (4) DNA-binding transcriptional regulator, MurR/RpiR family, contains HTH and SIS domains [Transcription]
COG1940 (2) Sugar kinase of the NBD/HSP70 family, may contain an N-terminal HTH domain [Transcription, Carbohydrate transport and metabolism]
COG2235 (4) Arginine deiminase [Amino acid transport and metabolism]
COG2323 (7) Uncharacterized membrane protein YcaP, DUF421 family [Function unknown]
COG2335 (21) Peptidoglycan hydrolase (amidase) enhancer domain [Cell

wall/membrane/envelope biogenesis]

- COG2812** (2) DNA polymerase III, gamma/tau subunits [Replication, recombination and repair]
COG2826 (1) Transposase and inactivated derivatives, IS30 family [Mobilome: prophages, transposons]
COG2890 (62) Methylase of polypeptide chain release factors [Translation, ribosomal structure and biogenesis]
COG3279 (17) DNA-binding response regulator, LytR/AlgR family [Transcription, Signal transduction mechanisms]
COG3290 (13) Sensor histidine kinase regulating citrate/malate metabolism [Signal transduction mechanisms]
COG3415 (1) Transposase [Mobilome: prophages, transposons]
COG3608 (2) ABC-type uncharacterized transport system, permease component [General function prediction only]
COG4632 (2) Exopolysaccharide biosynthesis protein related to N-acetylglucosamine-1-phosphodiester alpha-N-acety. [Carbohydrate transport and metabolism]
COG5279 (2) Cytokinesis protein 3, contains TGc (transglutaminase/protease-like) domain [Cell cycle control, cell division, chromosome partitioning]
COG5421 (1) Transposase [Mobilome: prophages, transposons]
COG5492 (1) Uncharacterized conserved protein YjdB, contains Ig-like domain [General function prediction only]
MTH00151 (1) NADH dehydrogenase subunit 5; Provisional
pfam00301 (1) Rubredoxin.
pfam00302 (1) Chloramphenicol acetyltransferase.
pfam00334 (2) Nucleoside diphosphate kinase.
pfam00472 (1) RF-1 domain.
pfam00486 (1) Transcriptional regulatory protein, C terminal.
pfam00583 (2) Acetyltransferase (GNAT) family.
pfam00657 (2) GDSL-like Lipase/Acylhydrolase.
pfam00875 (1) DNA photolyase.
pfam00892 (2) EamA-like transporter family.
pfam01066 (1) CDP-alcohol phosphatidyltransferase.
pfam01197 (8437) Ribosomal protein L31.
pfam01551 (31) Peptidase family M23.
pfam01648 (4) 4'-phosphopantetheinyl transferase superfamily.
pfam01960 (1) ArgJ family.
pfam01996 (1) F420-0:Gamma-glutamyl ligase.
pfam02368 (1) Bacterial Ig-like domain (group 2).
pfam02388 (1) FemAB family.
pfam02436 (1) Conserved carboxylase domain.
pfam02482 (3) Sigma 54 modulation protein / S30EA ribosomal protein.
pfam02502 (104) Ribose/Galactose Isomerase.
pfam02518 (3) Histidine kinase-, DNA gyrase B-, and HSP90-like ATPase.
pfam02575 (1) YbaB/Ebfc DNA-binding family.
pfam02590 (12) Predicted SPOUT methyltransferase.
pfam02645 (1) Uncharacterized protein, DegV family COG1307.
pfam02666 (1) Phosphatidylserine decarboxylase.
pfam02810 (6) SEC-C motif. [HC]
pfam02897 (3) Prolyl oligopeptidase, N-terminal beta-propeller domain.
pfam03441 (1) FAD binding domain of DNA photolyase.

- [pfam03462](#) (3) PCR domain.
[pfam03481](#) (5) Putative GTP-binding controlling metal-binding.
[pfam03840](#) (1) Preprotein translocase SecG subunit.
[pfam03947](#) (1) Ribosomal Proteins L2, C-terminal domain.
[pfam04011](#) (1) LemA family.
[pfam04246](#) (1) Positive regulator of sigma(E), RseC/MucC.
[pfam04260](#) (3) Protein of unknown function (DUF436).
[pfam04313](#) (9) Type I restriction enzyme R protein N terminus (HSDR_N).
[pfam04397](#) (5) LytTr DNA-binding domain.
[pfam05532](#) (2) CsbD-like.
[pfam05932](#) (1) Tir chaperone protein (CesT) family.
[pfam06030](#) (4) Bacterial protein of unknown function (DUF916).
[pfam06107](#) (8) Bacterial protein of unknown function (DUF951).
[pfam06612](#) (38) Protein of unknown function (DUF1146).
[pfam06723](#) (1) MreB/Mbl protein.
[pfam07423](#) (1) Protein of unknown function (DUF1510).
[pfam07586](#) (1) Protein of unknown function (DUF1552).
[pfam07859](#) (1) alpha/beta hydrolase fold.
[pfam08245](#) (5) Mur ligase middle domain.
[pfam08282](#) (2) haloacid dehalogenase-like hydrolase.
[pfam08297](#) (1) U3 snoRNA associated.
[pfam08345](#) (1) Flagellar M-ring protein C-terminal.
[pfam08486](#) (6) Stage II sporulation protein.
[pfam09551](#) (11) Stage II sporulation protein R (spore_II.R).
[pfam09580](#) (6) Sporulation lipoprotein YhcN/YlaJ (Spore-YhcN-YlaJ).
[pfam09992](#) (2) Phosphodiester glycosidase.
[pfam10254](#) (2) PACS-1 cytosolic sorting protein.
[pfam10722](#) (1) Putative bacterial sensory transduction regulator.
[pfam11797](#) (4) Protein of unknown function C-terminal (DUF3324).
[pfam12007](#) (2) Protein of unknown function (DUF3501).
[pfam12116](#) (5) Stage III sporulation protein D.
[pfam12146](#) (1) Serine aminopeptidase, S33.
[pfam12224](#) (1) Putative amidoligase enzyme.
[pfam12732](#) (1) YtxH-like protein.
[pfam12838](#) (2) 4Fe-4S dicluster domain.
[pfam13353](#) (21) 4Fe-4S single cluster domain.
[pfam13472](#) (4) GDSL-like Lipase/Acylhydrolase family.
[pfam13508](#) (3) Acetyltransferase (GNAT) domain.
[pfam13518](#) (1) Helix-turn-helix domain.
[pfam13588](#) (9) Type I restriction enzyme R protein N terminus (HSDR_N).
[pfam13614](#) (5) AAA domain.
[pfam13629](#) (1) Pilus formation protein N terminal region.
[pfam13649](#) (3) Methyltransferase domain.
[pfam14397](#) (4) Sugar-transfer associated ATP-grasp.
[pfam14437](#) (40) MafB19-like deaminase.
[pfam14450](#) (1) Cell division protein FtsA.
[pfam14470](#) (1) Bacterial PH domain.
[pfam14501](#) (13) GHKL domain.
[pfam16321](#) (10) Sigma 54 modulation/S30EA ribosomal protein C terminus.
[pfam16339](#) (1) Domain of unknown function (DUF4969).
[pfam16403](#) (2) Domain of unknown function (DUF5011).
[pfam16916](#) (1) Dimerisation domain of Zinc Transporter.
[PHA02601](#) (1) integrase; Provisional
[PLN02662](#) (1) cinnamyl-alcohol dehydrogenase family protein
[PRK00011](#) (3) serine hydroxymethyltransferase; Reviewed
[PRK00019](#) (1362) 50S ribosomal protein L31; Reviewed
[PRK00053](#) (5) alanine racemase; Reviewed
[PRK00070](#) (5) 4'-phosphopantetheinyl transferase; Provisional
[PRK00103](#) (12) rRNA large subunit methyltransferase; Provisional
[PRK00107](#) (12) 16S rRNA methyltransferase GidB; Reviewed
[PRK00108](#) (16) phospho-N-acetylmuramoyl-pentapeptide-transferase; Provisional
[PRK00129](#) (3) uracil phosphoribosyltransferase; Reviewed
[PRK00153](#) (1) hypothetical protein; Validated
[PRK00436](#) (2) N-acetyl-gamma-glutamyl-phosphate reductase; Validated
[PRK00528](#) (5) 50S ribosomal protein L31; Reviewed
[PRK00591](#) (83) peptide chain release factor 1; Validated
[PRK00601](#) (18) deoxyuridine 5'-triphosphate nucleotidohydrolase; Provisional
[PRK00723](#) (1) phosphatidylserine decarboxylase; Provisional
[PRK00942](#) (1) acetylglutamate kinase; Provisional
[PRK01388](#) (4) arginine deiminase; Provisional
[PRK01678](#) (7101) 50S ribosomal protein L31 type B; Reviewed
[PRK02102](#) (1) ornithine carbamoyltransferase; Validated
[PRK04296](#) (423) thymidine kinase; Provisional
[PRK05192](#) (13) tRNA uridine 5-carboxymethylaminomethyl modification enzyme GidA; Validated
[PRK05326](#) (6) potassium/proton antiporter; Reviewed
[PRK05385](#) (1) phosphoribosylaminoimidazole synthetase; Provisional
[PRK05388](#) (1) bifunctional ornithine acetyltransferase/N-acetylglutamate synthase protein; Validated
[PRK05452](#) (1) anaerobic nitric oxide reductase flavorubredoxin; Provisional
[PRK05563](#) (2) DNA polymerase III subunits gamma and tau; Validated
[PRK05571](#) (104) ribose-5-phosphate isomerase B; Provisional
[PRK05667](#) (2) DNA primase; Validated
[PRK05899](#) (12) transketolase; Reviewed
[PRK07681](#) (1) aspartate aminotransferase; Provisional
[PRK09328](#) (51) N5-glutamine S-adenosyl-L-methionine-dependent methyltransferase; Provisional
[PRK09374](#) (1) 50S ribosomal protein L2; Validated
[PRK10351](#) (3) holo-(acyl carrier protein) synthase 2; Provisional
[PRK10671](#) (4) deoxyribodipyrimidine photolyase; Provisional
[PRK10776](#) (1) nucleoside triphosphate pyrophosphohydrolase; Provisional
[PRK10860](#) (3) tRNA-specific adenosine deaminase; Provisional
[PRK10871](#) (1) lipoprotein NlpD; Provisional
[PRK11086](#) (2) sensory histidine kinase DcuS; Provisional
[PRK11361](#) (17) acetoacetate metabolism regulatory protein AtoC; Provisional
[PRK11649](#) (28) putative peptidase; Provisional
[PRK11893](#) (1) methionyl-tRNA synthetase; Reviewed
[PRK12267](#) (2) methionyl-tRNA synthetase; Reviewed
[PRK12363](#) (3) phosphoglycerol transferase I; Provisional
[PRK12901](#) (8) preprotein translocase subunit SecA; Reviewed
[PRK12999](#) (1) pyruvate carboxylase; Reviewed
[PRK13690](#) (3) hypothetical protein; Provisional
[PRK13759](#) (18) arylsulfatase; Provisional
[PRK13930](#) (13) rod shape-determining protein MreB; Provisional

- PRK15182** (4) transcriptional regulator MurR; Provisional
smart00226 (4) Low molecular weight phosphatase family.
smart00283 (1) Methyl-accepting chemotaxis-like domains (chemotaxis sensory transducer).
smart00304 (1) HAMP (Histidine kinases, Adenylyl cyclases, Methyl binding proteins, Phosphatases) domain.
smart00357 (1) Cold shock protein domain.
smart00382 (3) ATPases associated with a variety of cellular activities.
smart00387 (1) Histidine kinase-like ATPases.
smart00448 (1) cheY-homologous receiver domain.
smart00470 (6) ParB-like nuclease domain.
smart00487 (5) DEAD-like helicases superfamily.
smart00490 (5) helicase superfamily c-terminal domain.
smart00530 (1) Helix-turn-helix XRE-family like proteins.
smart00562 (2) Enzymes that catalyze nonsubstrate specific conversions of nucleoside diphosphates to nucleoside triphosphates.
smart00635 (1) Bacterial Ig-like domain 2.
smart00849 (17) Metallo-beta-lactamase superfamily.
smart00850 (22) LytTr DNA-binding domain.
smart00862 (2) Transcriptional regulatory protein, C terminal.
smart00937 (10) This domain is found in peptide chain release factors.
smart01059 (1) Chloramphenicol acetyltransferase.
TIGR00057 (5) tRNA threonylcarbamoyl adenosine modification protein, Sua5/YciO/YrdC/YwIC family. [Protein synthesis, tRNA and rRNA base modification]
TIGR00105 (6) ribosomal protein L31. [Protein synthesis, Ribosomal proteins: synthesis and modification]
TIGR00236 (3) UDP-N-acetylglucosamine 2-epimerase. [Cell envelope, Biosynthesis and degradation of surface polysaccharides and lipopolysaccharides]
TIGR00473 (1) CDP-diacylglycerol-serine O-phosphatidyltransferase. [Fatty acid and phospholipid metabolism, Biosynthesis]
TIGR00556 (1) phosphopantetheine-protein transferase domain. [Protein fate, Protein modification and repair]
TCR00711 (12) ribosomal subunit interface protein. [Protein synthesis, Translation factors]
TIGR00744 (2) ROK family protein (putative glucokinase). [Unknown function, General]
TIGR00762 (1) EDD domain protein, DegV family. [Unknown function, General]
TIGR00810 (1) protein translocase, SecG subunit. [Protein fate, Protein and peptide secretion and trafficking]
TIGR00950 (1) Carboxylate/Amino Acid/Amine Transporter. [Transport and binding proteins, Amino acids, peptides and amines]
TIGR01068 (1) thioredoxin. [Energy metabolism, Electron transport]
TIGR01076 (10) LPXTG-site transpeptidase (sortase) family protein. [Cell envelope, Other, Protein fate, Protein and peptide secretion and trafficking]
TIGR01248 (3) AAA family ATPase, CDC48 subfamily.
TIGR01257 (3) retinal-specific rim ABC transporter. [Transport and binding proteins, Other]
TIGR01387 (2) heavy metal response regulator. [Regulatory functions, DNA interactions]
TIGR02150 (1) isopentenyl-diphosphate delta-isomerase, type 1. [Biosynthesis of cofactors, prosthetic groups, and carriers, Other]
TIGR02176 (1) pyruvate:ferredoxin (flavodoxin) oxidoreductase, homodimeric.
TIGR02377 (5) conserved hypothetical integral membrane protein.
TIGR02380 (13) undecaprenyl-phosphate alpha-N-acetylglucosaminyl 1-phosphatettransferase. [Cell envelope, Biosynthesis and degradation of surface polysaccharides and lipopolysaccharides]
TIGR02669 (16) SpoIID/LytB domain. [Unknown function, General]
TIGR02765 (1) cryptochrome, DASH family. [Cellular processes, Adaptations to atypical conditions]
TIGR02898 (7) sporulation lipoprotein, YhcN/YlaJ family. [Cellular processes, Sporulation and germination]
TIGR03023 (1) Undecaprenyl-phosphate glucose phosphotransferase.
TIGR03534 (8) protein-(glutamine-N5) methyltransferase, release factor-specific. [LIV]PRx[DE]TE (in Escherichia coli, IPRPDTE) confers specificity for the release factors rather than for ribosomal protein L3. [Protein fate, Protein modification and repair]
TIGR03556 (5) deoxyribodipyrimidine photo-lyase, 8-HDF type. [DNA metabolism, DNA replication, recombination, and repair]
TIGR03921 (1) type VII secretion-associated serine protease mycosin. [Protein fate, Protein and peptide secretion and trafficking, Protein fate, Protein modification and repair]
TIGR04181 (1) aminotransferase, LLPSF_NHT_00031 family.

11.5 Multiple-sequence alignment

Each L31-Firmicutes RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 11.1. (Superscript numbers refer to annotations listed in Section 11.2) The alignment may include sequences containing the RNA motif, as well as flanking sequence. The L31-Firmicutes RNA itself is denoted by the line underneath marked 5' and 3' on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in *gray letters*. Stems of predicted rho-independent transcription terminators, if any, are shaded **yellow**. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in **green**. (But note: these predictions are manually an-

notated, so they might be under-predicted.) Annotated start codons, if any, are shaded **green**. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-Crick or G-U pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U

pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, **red nucleotides**: nucleotide identity conserved more than 97% of the time, **black nucleotides**: 90%, **gray nucleotides**: 75%, **red circle** (◉): nucleotide is present 97% of the time, **black circle** (●): 90%, **gray circle** (◐): 75%, **white circle** (○): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Aka-1-1, Ami-1-3, Asp-1-1, Asp-2-1, Asp-4-1, Axy-1-1, Bag-1-1, Bag-2-1, Bal-2-1, Bal-2-2, Bal-2-3, Bal-3-1, Bam-1-1, Bam-10-1, Bam-11-1, Bam-12-1, Bam-13-1, Bam-14-1, Bam-15-1, Bam-16-1, Bam-17-1, Bam-18-1, Bam-19-1, Bam-2-1, Bam-20-1, Bam-21-1, Bam-22-1, Bam-23-1, Bam-24-1, Bam-25-1, Bam-3-1, Bam-5-1, Bam-6-1, Bam-7-1, Bam-8-1, Bam-9-2, Bam-9-3, Ban-1-1, Ban-10-1, Ban-11-1, Ban-12-1, Ban-13-1, Ban-14-1, Ban-15-1, Ban-16-1, Ban-17-1, Ban-17-2, Ban-18-1, Ban-18-2, Ban-19-1, Ban-2-1, Ban-21-1, Ban-21-10, Ban-21-11, Ban-21-12, Ban-21-13, Ban-21-14, Ban-21-15, Ban-21-16, Ban-21-17, Ban-21-18, Ban-21-19, Ban-21-2, Ban-21-20, Ban-21-3, Ban-21-4, Ban-21-5, Ban-21-6, Ban-21-7, Ban-21-8, Ban-21-9, Ban-22-1, Ban-23-1, Ban-24-1, Ban-25-1, Ban-26-1, Ban-27-1, Ban-28-1, Ban-29-1, Ban-3-1, Ban-30-1, Ban-31-1, Ban-32-1, Ban-33-1, Ban-34-1, Ban-35-1, Ban-36-1, Ban-37-1, Ban-38-1, Ban-39-1, Ban-5-1, Ban-6-1, Ban-7-1, Ban-8-1, Ban-9-1, Bar-1-1, Bar-1-2, Bar-1-3, Bar-1-4, Bar-1-5, Bar-2-1, Bat-1-1, Bat-10-1, Bat-11-1, Bat-12-1, Bat-13-1, Bat-14-1, Bat-16-1, Bat-17-1, Bat-2-1, Bat-3-1, Bat-4-1, Bat-5-1, Bat-6-1, Bat-7-1, Bat-9-1, Baz-2-1, Bba-2-2, Bbo-2-1, Bbo-3-1, Bbo-6-1, Bbo-7-1, Bbr-3-1, Bce-10-1, Bce-100-1, Bce-101-1, Bce-102-1, Bce-103-1, Bce-104-1, Bce-105-1, Bce-107-1, Bce-108-1, Bce-109-1, Bce-11-1, Bce-110-1, Bce-111-1, Bce-112-1, Bce-113-1, Bce-114-1, Bce-115-1, Bce-116-1, Bce-117-1, Bce-118-1, Bce-119-1, Bce-12-1, Bce-120-1, Bce-121-1, Bce-122-1, Bce-123-1, Bce-124-1, Bce-125-1, Bce-126-1, Bce-127-1, Bce-128-1, Bce-129-1, Bce-13-1, Bce-130-1, Bce-131-1, Bce-132-1, Bce-133-1, Bce-134-1, Bce-135-1, Bce-136-1, Bce-137-1, Bce-138-1, Bce-139-1, Bce-14-1, Bce-14-2, Bce-140-1, Bce-141-1, Bce-142-1, Bce-143-1, Bce-144-1, Bce-145-1, Bce-146-1, Bce-147-1, Bce-149-2, Bce-15-1, Bce-16-1, Bce-17-1, Bce-17-2, Bce-18-1, Bce-19-1, Bce-2-1, Bce-2-2, Bce-20-1, Bce-21-1, Bce-22-1, Bce-23-1, Bce-24-1, Bce-24-2, Bce-25-1, Bce-26-1, Bce-27-1, Bce-28-1, Bce-28-2, Bce-29-1, Bce-3-1, Bce-30-1, Bce-31-1, Bce-32-1, Bce-33-1, Bce-34-1, Bce-35-1, Bce-36-1, Bce-37-1, Bce-38-1, Bce-39-1, Bce-4-1, Bce-40-1, Bce-41-1, Bce-42-1, Bce-43-1, Bce-44-1, Bce-45-1, Bce-46-1, Bce-47-1, Bce-47-2, Bce-47-3, Bce-47-4, Bce-47-5, Bce-48-1, Bce-49-1, Bce-5-1, Bce-50-1, Bce-51-1, Bce-52-1, Bce-53-1, Bce-54-1, Bce-55-1, Bce-56-1, Bce-57-1, Bce-58-1, Bce-59-1, Bce-60-1, Bce-61-1, Bce-62-1, Bce-64-1, Bce-65-1, Bce-66-1, Bce-67-1, Bce-68-1, Bce-69-1, Bce-7-1, Bce-70-1, Bce-71-1, Bce-72-1, Bce-73-1, Bce-74-1, Bce-75-1, Bce-76-1, Bce-77-1, Bce-78-1, Bce-79-1, Bce-8-1, Bce-80-1, Bce-81-1, Bce-82-1, Bce-83-1, Bce-84-1, Bce-85-1, Bce-86-1, Bce-87-1, Bce-88-1, Bce-89-1, Bce-9-1, Bce-90-1, Bce-91-1, Bce-92-1, Bce-93-1, Bce-94-1, Bce-95-1, Bce-96-1, Bce-97-1, Bce-98-1, Bce-99-1, Bcl-2-1, Bco-1-1, Bco-10-1, Bco-4-1, Bco-4-2, Bco-6-1, Bco-7-1, Bco-8-1, Bcy-1-1, Ben-1-1, Ben-2-1, Bff-2-1, Bgi-1-1, Bgl-1-1, Bha-1-1, Bin-2-1, Bin-3-1, Bis-1-1, Bla-1-1, Bla-4-1, Bla-5-1, Bli-1-1, Bli-1-2, Bli-10-1, Bli-11-1, Bli-2-2, Bli-3-1, Bli-4-1, Bli-5-1, Bli-6-1, Bli-7-1, Bli-8-1, Bli-9-1, Bma-4-2, Bma-4-3, Bme-10-1, Bme-2-1, Bme-3-1, Bme-5-1, Bme-7-1, Bme-8-1, Bme-9-1, Bmu-1-1, Bmy-1-1, Bmy-2-1, Bmy-3-1, Bmy-4-1, Bmy-4-2, Bmy-4-3, Bmy-4-4, Bmy-5-1, Bmy-6-1, Bmy-7-1, Boc-1-1, Bpa-2-1, Bpa-3-1, Bps-2-1, Bpu-1-1, Bpu-3-1, Bpu-3-2, Bpu-3-3, Bpu-4-1, Bpu-5-1, Bpu-6-1, Bpu-7-1, Bsa-1-2, Bsa-1-3, Bsa-2-1, Bsa-3-1, Bsi-2-1, Bsi-3-1, Bsm-1-1, Bso-2-1, Bsp-1-1, Bsp-10-1, Bsp-11-1, Bsp-12-1, Bsp-14-1, Bsp-16-1, Bsp-2-1, Bsp-20-1, Bsp-23-1, Bsp-25-1, Bsp-26-1, Bsp-29-1, Bsp-31-1, Bsp-32-1, Bsp-33-1, Bsp-35-1, Bsp-38-1, Bsp-46-1, Bsp-48-1, Bsp-49-1, Bsp-5-1, Bsp-50-1, Bsp-51-1, Bsp-55-1, Bsp-57-1, Bsp-59-1, Bsp-6-1, Bsp-61-1, Bsp-63-1, Bsp-64-1, Bsp-65-1, Bsp-67-1, Bsp-68-1, Bsp-69-1, Bsp-70-1, Bsp-71-1, Bsp-72-1, Bsp-78-1, Bsp-80-1, Bsp-82-1, Bsp-87-1, Bsp-88-1, Bsp-89-1, Bsp-91-1, Bsp-93-1, Bsp-95-1, Bsp-97-1, Bst-1-2, Bst-1-3, Bst-1-5, Bst-2-1, Bsu-1-1, Bsu-10-1, Bsu-12-1, Bsu-13-1, Bsu-14-1, Bsu-15-1, Bsu-16-1, Bsu-17-1, Bsu-18-1, Bsu-19-1, Bsu-2-1, Bsu-20-1, Bsu-21-1, Bsu-22-1, Bsu-24-1, Bsu-25-1, Bsu-26-1, Bsu-27-1, Bsu-28-1, Bsu-29-1, Bsu-3-1, Bsu-30-1, Bsu-31-1, Bsu-32-1, Bsu-33-1, Bsu-34-1, Bsu-36-1, Bsu-37-1, Bsu-38-1, Bsu-39-1, Bsu-4-1, Bsu-40-1, Bsu-41-1, Bsu-42-1, Bsu-43-1, Bsu-44-1, Bsu-45-1, Bsu-46-1, Bsu-47-1, Bsu-48-1, Bsu-5-1, Bsu-6-1, Bsu-6-2, Bsu-7-1, Bsu-8-1, Bsu-9-1, Bth-1-1, Bth-10-1, Bth-11-1, Bth-12-1, Bth-13-1, Bth-14-1, Bth-15-1, Bth-16-1, Bth-17-1, Bth-18-1, Bth-19-1, Bth-2-1, Bth-20-1, Bth-21-1, Bth-22-1, Bth-22-2, Bth-23-1, Bth-24-1, Bth-25-1, Bth-26-1, Bth-27-1, Bth-28-1, Bth-29-1, Bth-3-1, Bth-30-1, Bth-31-1, Bth-32-1, Bth-33-1, Bth-34-1, Bth-35-1, Bth-36-1, Bth-37-1, Bth-38-1, Bth-39-1, Bth-39-2, Bth-4-1, Bth-40-1, Bth-41-1, Bth-42-1, Bth-43-1, Bth-44-1, Bth-44-2, Bth-44-3, Bth-44-5, Bth-45-2, Bth-46-1, Bth-47-1, Bth-5-1, Bth-6-1, Bth-7-1, Bth-8-1, Bth-9-1, Bto-1-1, Bva-1-1, Bve-1-1, Bve-1-2, Bve-1-3, Bve-1-4, Bve-2-1, Bve-3-1, Bve-4-1, Bve-5-1, Bvi-3-1, Bwe-1-1, Bwe-2-1, Bzh-1-1, Cde-1-1, Cin-1-1, Cje-1-1, Cje-2-1, Cma-1-1, Cma-2-1, Cmi-1-1, Csp-4-1, Csp-5-1, Csp-6-1, Csp-7-1, Ean-2-1, Eav-2-1, Eav-2-2, Eba-1-1, Eca-2-1, Eca-4-1, Eca-6-1, Eca-7-1, Ece-1-1, Ece-1-2, Ece-1-3, Ece-1-4, Ece-1-5, Ece-1-6, Ece-1-7, Ece-2-1, Ecl-1-1, Edo-1-1, Edu-1-1, Edu-1-2, Edu-2-2, Edu-3-1, Edu-4-1, Efa-1-1, Efa-1-10, Efa-1-11, Efa-1-12, Efa-1-13, Efa-1-14, Efa-1-15, Efa-1-16, Efa-1-17, Efa-1-18, Efa-1-19, Efa-1-2, Efa-1-20, Efa-1-21, Efa-1-22, Efa-1-23, Efa-1-24, Efa-1-25, Efa-1-26, Efa-1-28, Efa-1-29, Efa-1-3, Efa-1-30, Efa-1-31, Efa-1-32, Efa-1-33, Efa-1-34, Efa-1-35, Efa-1-36, Efa-1-37, Efa-1-38, Efa-1-39, Efa-1-4, Efa-1-40, Efa-1-41, Efa-1-42, Efa-1-43, Efa-1-44, Efa-1-45, Efa-1-46, Efa-1-47, Efa-1-48, Efa-1-49, Efa-1-5, Efa-1-50, Efa-1-51, Efa-1-52, Efa-1-53, Efa-1-54, Efa-1-55, Efa-1-56, 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Sho-1-1, Sho-2-1, Sho-3-10, Sho-3-11, Sho-3-12, Sho-3-13, Sho-3-14, Sho-3-16, Sho-3-17, Sho-3-3, Sho-3-4, Sho-3-5, Sho-3-6, Sho-3-7, Sho-3-8, Sho-3-9, Sho-4-1, Sho-5-1, Slu-2-1, Slu-4-1, Slu-5-1, Slu-6-1, Slu-7-1, Slu-8-1, Slu-9-1, Sma-2-1, Spe-2-1, Spn-1-1, Spn-1-2, Spn-1-3, Spn-1-4, Spn-1-5, Spn-1-6, Spn-1-7, Spn-1-8, Sps-1-1, Sps-3-1, Ssa-1-1, Ssa-2-2, Ssa-2-3, Ssa-3-1, Ssc-1-2, Ssc-1-3, Ssc-1-4, Ssc-2-2, Ssc-2-3, Ssc-3-1, Ssc-4-1, Ssi-4-1, Ssp-11-1, Ssp-12-1, Ssp-13-1, Ssp-15-1, Ssp-2-1, Ssp-4-1, Ssp-7-1, Ssp-8-1, Ssp-9-1, Ste-1-1, Svi-1-1, Swa-2-1, Swa-2-2, Swa-2-4, Swa-2-5, Swa-3-1, Swa-4-1, Swa-5-1, Swa-6-1, Swa-7-1, Sxy-2-1, Tmu-1-1, Tmu-3-1, Tsp-1-1, Tsp-2-1, Vma-1-1, Wci-1-2, Wci-1-3, Wci-2-1, Wko-1-1, Xca-1-1, Xca-2-1, Xca-3-1, Xca-4-1, Xca-5-1, Xva-1-1, Xva-2-1, bLF-1-1, env-100, env-1000, env-101, env-1012, env-1016, env-1019, env-102, env-1020, env-1021, env-103, env-1030, env-1035, env-1037, env-104, env-1042, env-1046, env-1047, env-105, env-106, env-1063, env-1065, env-1068, env-1069, env-107, env-1070, env-1071, env-108, env-1083, env-1085, env-1086, env-1087, env-1089, env-109, env-1090, env-1096, env-1099, env-11, env-110, env-1100, env-111, env-1111, env-112, env-1123, env-1126, env-1127, env-1128, env-113, env-1130, env-1131, env-1136, env-114, env-1140, env-1141, env-1142, env-1143, env-1144, env-1145, env-1147, env-1148, env-1149, env-115, env-1150, env-1151, env-1152, env-1153, env-1154, env-1155, env-1156, env-1157, env-1158, env-1159, env-116, env-1160, env-1161, env-1162, env-1163, env-1167, env-117, env-1173, env-1174, env-1176, env-118, env-1180, env-1181, env-1183, env-1185, env-119, env-1192, env-1193, env-1194, env-1195, env-1196, env-12, env-120, env-121, env-122, env-1223, env-1226, env-1227, env-1229, env-123, env-124, env-125, env-126, env-127, env-128, env-1289, env-129, env-130, env-131, env-1313, env-1314, env-1315, env-1316, env-1317, env-1318, env-1319, env-132, env-1320, env-1321, env-1322, env-1323, env-1324, env-1325, env-1326, env-1327, env-1328, env-1329, env-133, env-1330, env-1331, env-1332, env-1333, env-1334, env-1335, env-1336, env-1338, env-1339, env-134, env-1340, env-1341, env-1343, env-1344, env-1345, env-1346, env-1347, env-1348, env-1349, env-135, env-1350, env-1351,

12 L31-Gammaproteobacteria

12.1 Taxa

The taxonomy of each organism containing a putative L31- in *E. coli*). The abbreviations will be used to identify each individual L31-Gammaproteobacteria RNA is listed, with abbreviations identifying each hit Gammaproteobacteria RNA in Sections 12.2 and 12.4. (e.g., “Eco-1-1” and “Eco-1-2” might hypothetically represent two distinct RNAs

abbrev. of hits

Sen-1-1

taxonomy of species

AKU_12601Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae *Salmonella enterica* subsp. *enterica* serovar Paratyphi A

str

Ban-1-1	Bacteria Actinobacteria Actinobacteridae Bifidobacteriales Bifidobacteriaceae <i>Bifidobacterium animalis</i> subsp. <i>lactis</i> HN019
bsy-1-1	Bacteria bacteria symbiont BFO1 of <i>Frankliniella occidentalis</i>
Cmi-1-1	Bacteria Proteobacteria Betaproteobacteria Burkholderiales Burkholderiaceae <i>Caballeronia mineralivorans</i> PML1(12)
Aal-1-1 to Aal-1-2	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas allosaccharophila</i>
Aaq-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas aquariorum</i> AAK1
Aaq-2-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas aquatica</i>
Aau-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas australiensis</i>
Abe-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas bestiarum</i>
Abi-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas bivalvium</i>
Aca-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas caviae</i>
Aca-2-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas caviae</i> Ae398
Adh-1-1 to Adh-1-3	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas dhakensis</i>
Adi-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas diversa</i> 2478-85
Adi-2-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas diversa</i> CDC 2478-85
Aen-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas encheleia</i>
Aen-2-1 to Aen-2-3	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas enteropelogenes</i>
Aeu-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas eucrenophila</i>
Afi-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas finlandiensis</i>
Afl-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas fluvialis</i>
Ahy-1-1 to Ahy-1-2	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i>
Ahy-2-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> 113
Ahy-3-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> 14
Ahy-4-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> 145
Ahy-5-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> 173
Ahy-6-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> 187
Ahy-7-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> 226
Ahy-8-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> 259
Ahy-9-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> 277
Ahy-10-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> 4AK4
Ahy-11-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> AD9
Ahy-12-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> AL09-71
Ahy-13-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> J-1
Ahy-14-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> ML09-119
Ahy-15-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> NJ-35
Ahy-19-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> pc104A
Ahy-16-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> SNUFPC-A8
Ahy-17-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> SSU
Ahy-20-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> subsp. <i>hydrophila</i> ATCC 7966
Ahy-21-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> subsp. <i>ranae</i>
Ahy-18-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas hydrophila</i> YL17
Aja-1-1 to Aja-1-2	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas jandaei</i>
Aja-2-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas jandaei</i> Riv2
Ala-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas lacus</i>
Ame-1-1 to Ame-1-3	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas media</i>
Ame-2-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas media</i> WS
Amo-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas molluscorum</i> 848
Api-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas piscicola</i>
Apo-1-1	Bacteria Proteobacteria Gammaproteobacteria Aeromonadales Aeromonadaceae <i>Aeromonas popoffii</i>

Ari-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas rivuli</i>
Asa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas salmonicida</i>
Asa-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas salmonicida</i> subsp. <i>achromogenes</i> AS03
Asa-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas salmonicida</i> subsp. <i>masoucida</i> NBRC 13784
Asa-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas salmonicida</i> subsp. <i>pectinolytica</i> 34mel
Asa-5-1 to Asa-5-4	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas salmonicida</i> subsp. <i>salmonicida</i>
Asa-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas salmonicida</i> subsp. <i>salmonicida</i> 01-B526
Asa-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas salmonicida</i> subsp. <i>salmonicida</i> A449
Asa-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas sanarellii</i>
Asc-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas schubertii</i>
Asi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas simiae</i>
Aso-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas sobria</i>
Asp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas</i> sp. HZM
Asp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas</i> sp. L1B5.3
Asp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas</i> sp. ZOR0001
Asp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas</i> sp. ZOR0002
Ata-1-1 to Ata-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas taiwanensis</i>
Ate-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas tecta</i>
Ave-1-1 to Ave-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas veronii</i>
Ave-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas veronii</i> AER39
Ave-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas veronii</i> AER397
Ave-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas veronii</i> AMC34
Ave-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas veronii</i> AMC35
Ave-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas veronii</i> B565
Ave-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas veronii</i> bv. <i>sobria</i>
Ave-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas veronii</i> bv. <i>veronii</i>
Ave-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas veronii</i> Hm21
Osm-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Oceanimonas smirnovii</i> ATCC BAA-899
Osp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Oceanimonas</i> sp. GK1
Tau-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Tolumonas auensis</i> DSM 9187
Tli-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Tolumonas lignilytica</i>
Sam-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Succinivibrionaceae	<i>Succinimonas amylolytica</i> DSM 2873
Asa-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Aestuariibacter salexigens</i> DSM 15300
Aal-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Agarivorans albus</i> MKT 106
Ama-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Aliagarivorans marinus</i> DSM 23064
Ata-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Aliagarivorans taiwanensis</i> DSM 22990
Aae-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alishewanella aestuarii</i> B11
Aag-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alishewanella agri</i> BL06
Aje-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alishewanella jeotgali</i> KCTC 22429
Aau-2-1 to Aau-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas australica</i>
Ama-2-1 to Ama-2-3	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas macleodii</i>
Ama-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas macleodii</i> AltDE1
Ama-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas macleodii</i> ATCC 27126
Ama-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas macleodii</i> str. 'Aegean Sea MED64'
Ama-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas macleodii</i> str. 'Balearic Sea AD45'
Ama-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas macleodii</i> str. 'Black Sea 11'
Ama-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas macleodii</i> str. 'Deep ecotype'
Ama-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas macleodii</i> str. 'English Channel 673'
Ama-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas macleodii</i> str. 'Ionian Sea U7'
Ama-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas macleodii</i> str. 'Ionian Sea U8'
Ama-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas macleodii</i> str. 'Ionian Sea UM4b'
Ama-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas macleodii</i> str. 'Ionian Sea UM7'
Ama-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas marina</i>
Asp-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas</i> sp. ALT199
Asp-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas</i> sp. LOR
Asp-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas</i> sp. LTR
Asp-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Alteromonas</i> sp. SN2
Gag-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Glaciacola agarilytica</i> NO2
Gar-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Glaciacola arctica</i> BSs20135
Gch-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Glaciacola chathamensis</i> S18K6
Gli-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Glaciacola lipolytica</i> E3
Gme-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Glaciacola mesophila</i> KMM 241
Gni-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Glaciacola nitratireducens</i> FR1064
Gpa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Glaciacola pallidula</i> DSM 14239 = ACAM 615
Gpo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Glaciacola polaris</i> LMG 21857

Gps-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Glaciacola psychrophila</i> 170
Gpu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Glaciacola punicea</i> DSM 14233 = ACAM 611
Gsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Glaciacola sp.</i> 4H-3-7+YE-5
Gsp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Glaciacola sp.</i> HTCC2999
Maq-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Marinobacter aquaeolei</i> VT8
Mhy-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Marinobacter hydrocarbonoclasticus</i> ATCC 49840
Msp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Marinobacter sp.</i> C1S70
Msp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Marinobacter sp.</i> EN3
Msp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Marinobacter sp.</i> EVN1
Msu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Marinobacter subterrani</i>
Sch-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Alteromonadaceae	<i>Salinimonas chungwhensis</i> DSM 16280
Aba-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales		<i>bacterium</i> TW-7
Csp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Colwelliaceae	<i>Colwellia sp.</i> 8_GOM-1096m
Tac-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Colwelliaceae	<i>Thalassomonas actiniarum</i>
Tvi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Colwelliaceae	<i>Thalassomonas viridans</i>
Tsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Colwelliaceae	<i>Thalassotalea sp.</i> ND16A
Fba-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Ferrimonadaceae	<i>Ferrimonas balearica</i> DSM 9799
Ffu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Ferrimonadaceae	<i>Ferrimonas futtsuensis</i> DSM 18154
Fky-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Ferrimonadaceae	<i>Ferrimonas kyonanensis</i> DSM 18153
Fse-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Ferrimonadaceae	<i>Ferrimonas senticii</i> DSM 18821
Iat-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Idiomarinaceae	<i>Idiomarina atlantica</i>
Iba-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Idiomarinaceae	<i>Idiomarina baltica</i> OS145
Ilo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Idiomarinaceae	<i>Idiomarina loihiensis</i> GSL 199
Ilo-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Idiomarinaceae	<i>Idiomarina loihiensis</i> L2TR
Isa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Idiomarinaceae	<i>Idiomarina salinarum</i>
Ise-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Idiomarinaceae	<i>Idiomarina sediminum</i> DSM 21906
Isp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Idiomarinaceae	<i>Idiomarina sp.</i> 28-8
Isp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Idiomarinaceae	<i>Idiomarina sp.</i> A28L
Ixi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Idiomarinaceae	<i>Idiomarina xiamenensis</i> 10-D-4
Mma-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Moritellaceae	<i>Moritella marina</i> ATCC 15381
Asa-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Algicola sagamiensis</i> DSM 14643
Pag-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas agarivorans</i> S816
Par-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas arctica</i> A 37-1-2
Pat-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas atlantica</i> T6c
Pci-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas citrea</i> NCIMB 1889
Pdi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas distincta</i>
Pel-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas elyakovii</i>
Pfl-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas flavipulchra</i> JG1
Pfl-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas flavipulchra</i> NCIMB 2033 = ATCC BAA-314
Pfu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas fuliginea</i>
Pha-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas haloplanktis</i> ANT/505
Pha-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas haloplanktis</i> ATCC 14393
Pha-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas haloplanktis</i> TAC125
Pli-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas lipolytica</i> SCSIO 04301
Plu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas luteoviolacea</i>
Plu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas luteoviolacea</i> 2ta16
Plu-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas luteoviolacea</i> B = ATCC 29581
Plu-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas luteoviolacea</i> S4054
Pma-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas marina</i> mano4
Ppi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas piratica</i>
Ppi-2-1 to Ppi-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas piscicida</i>
Ppi-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas piscicida</i> ATCC 15057
Ppi-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas piscicida</i> JCM 20779
Pru-1-1 to Pru-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas rubra</i>
Pru-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas rubra</i> ATCC 29570
Pru-3-1 to Pru-3-2	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas ruthenica</i>
Pru-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas ruthenica</i> CP76
Psp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas sp.</i> '520P1 No. 412'
Psp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas sp.</i> 23_GOM-1509m
Psp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas sp.</i> 6BO_GOM-1096m
Psp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas sp.</i> A2
Psp-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas sp.</i> AC163
Psp-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas sp.</i> BSi20311
Psp-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas sp.</i> BSi20429
Psp-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas sp.</i> BSi20439

Psp-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	BSi20480
Psp-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	BSi20495
Psp-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	BSi20652
Psp-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	Bsw20308
Psp-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	ECSMB14103
Psp-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	ND6B
Psp-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	NJ631
Psp-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	NW 4327
Psp-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	PAMC 22718
Psp-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	PLSV
Psp-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	S2292
Psp-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	S3431
Psp-21-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	S8-38
Psp-22-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	S8-8
Psp-23-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	SCSIO_11900
Psp-24-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	SM9913
Psp-25-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	TAB23
Psp-26-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	TAE56
Psp-27-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	TAE79
Psp-28-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	TAE80
Psp-29-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	TB13
Psp-30-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	TB25
Psp-31-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	TB41
Psp-32-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas</i> sp.	TB64
Psp-33-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas spongiae</i>	UST010723-006
Ptu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas tunicata</i>	D2
Pun-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Pseudoalteromonadaceae	<i>Pseudoalteromonas undina</i>	NCIMB 2128
Paq-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Psychromonadaceae	<i>Psychromonas aquimarina</i>	ATCC BAA-1526
Par-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Psychromonadaceae	<i>Psychromonas arctica</i>	DSM 14288
Pha-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Psychromonadaceae	<i>Psychromonas hadalis</i>	ATCC BAA-638
Pin-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Psychromonadaceae	<i>Psychromonas ingrahamii</i>	37
Pos-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Psychromonadaceae	<i>Psychromonas ossibalaenae</i>	ATCC BAA-1528
Psp-34-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Psychromonadaceae	<i>Psychromonas</i> sp.	CNPT3
Psp-35-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Psychromonadaceae	<i>Psychromonas</i> sp.	SP041
Sal-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella algae</i>	
Sal-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella algae</i>	JCM 21037 = NBRC 103173
Sam-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella amazonensis</i>	SB2B
Sba-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella baltica</i>	BA175
Sba-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella baltica</i>	OS117
Sba-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella baltica</i>	OS155
Sba-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella baltica</i>	OS183
Sba-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella baltica</i>	OS185
Sba-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella baltica</i>	OS195
Sba-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella baltica</i>	OS223
Sba-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella baltica</i>	OS625
Sba-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella baltica</i>	OS678
Sbe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella benthica</i>	KT99
Sco-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella colwelliana</i>	ATCC 39565
Sde-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella decolorationis</i>	S12
Sde-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella denitrificans</i>	OS217
Sfi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella fidelis</i>	ATCC BAA-318
Sfr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella frigidimarina</i>	NCIMB 400
Sha-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella halifaxensis</i>	HAW-EB4
Sha-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella haliotis</i>	JCM 14758
Slo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella loihica</i>	PV-4
Sma-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella mangrovi</i>	
Sma-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella marina</i>	JCM 15074
Son-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella oneidensis</i>	MR-1
Spe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella pealeana</i>	ATCC 700345
Spi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella piezotolerans</i>	WP3
Spu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella putrefaciens</i>	200
Spu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella putrefaciens</i>	CN-32
Sse-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella sediminis</i>	HAW-EB3
Ssp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella</i> sp.	38A_GOM-205m
Ssp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella</i> sp.	ANA-3

Ssp-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella sp.</i>	cp20
Ssp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella sp.</i>	ECSMB14101
Ssp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella sp.</i>	ECSMB14102
Ssp-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella sp.</i>	HN-41
Ssp-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella sp.</i>	MR-4
Ssp-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella sp.</i>	MR-7
Ssp-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella sp.</i>	POL2
Ssp-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella sp.</i>	W3-18-1
Ssp-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella sp.</i>	ZOR0012
Svi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella violacea</i>	DSS12
Swa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella waksmanii</i>	ATCC BAA-643
Swo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella woodyi</i>	ATCC 51908
Sxi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	<i>Shewanella xiamenensis</i>	
CBa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	CandidatusBaumannia	<i>Candidatus</i>	<i>Baumannia cicadellinicola</i>	
Aik-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Chromatiaceae	<i>Arsukibacterium ikkense</i>	
Asp-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Chromatiaceae	<i>Arsukibacterium sp.</i>	MJ3
Pme-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Chromatiaceae	<i>Pararheinheimera mesophila</i>	
Pte-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Chromatiaceae	<i>Pararheinheimera texasensis</i>	DSM 17496
Rba-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Chromatiaceae	<i>Rheinheimera baltica</i>	DSM 14885
Rna-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Chromatiaceae	<i>Rheinheimera nanhaiensis</i>	E407-8
Rpe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Chromatiaceae	<i>Rheinheimera perlucida</i>	DSM 18276
Rsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Chromatiaceae	<i>Rheinheimera sp.</i>	A13L
Rsp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Chromatiales	Chromatiaceae	<i>Rheinheimera sp.</i>	KL1
Baq-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Budviciaceae	<i>Budvicia aquatica</i>	DSM 5075 = ATCC 35567
Lgr-1-1 to Lgr-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Budviciaceae	<i>Lemnimorella grimontii</i>	ATCC 33999 = DSM 5078
Pfo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Budviciaceae	<i>Pragia fontium</i>	
Bag-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Buttiauxella agrestis</i>	
Bag-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Buttiauxella agrestis</i>	ATCC 33320
Cne-1-1 to Cne-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cedecea neteri</i>	
Cam-1-1 to Cam-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter amalonicus</i>	
Cam-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter amalonicus</i>	Y19
Cfa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter farmeri</i>	GTC 1319
Cbr-1-1 to Cbr-1-7	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter braakii</i>
Cfr-1-1 to Cfr-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i>
Cfr-2-1 to Cfr-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i> ATCC 8090 = MTCC 1658
Cfr-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i> CFNIH1
Cfr-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i> MGH 56
Cfr-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i> NBRC 12681
Cfr-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i> RLS1
Cfr-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i> UCI 31
Cfr-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter freundii</i> UCI 32
Cse-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter sedlakii</i> NBRC 105722
Csp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter sp.</i> BIDMC107
Csp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter sp.</i> BIDMC108
Csp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter sp.</i> MGH100
Csp-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter sp.</i> MGH103
Csp-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter sp.</i> MGH104
Csp-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter sp.</i> MGH105
Csp-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter sp.</i> MGH106
Csp-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter sp.</i> MGH109
Csp-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter sp.</i> MGH110
Csp-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter sp.</i> MGH99
Cwe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter	Citrobacter freundii complex <i>Citrobacter werkmanii</i> NBRC 105721
Cko-1-1 to Cko-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter koseri</i>	
Cpa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter pasteurii</i>	
Cro-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter rodentium</i>	
Cro-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter rodentium</i>	NBRC 105723
Csp-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter sp.</i>	JT3
Csp-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter sp.</i>	MGH 55

Eco-720-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O69:H11 str. 2009C-3601
Eco-721-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O6:H16 str. 99-3165
Eco-722-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O6:H16 str. F5656C1
Eco-723-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O6:H16:CFA/II str. B2C
Eco-724-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O78:H12 str. 00-3279
Eco-725-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O79:H7 str. 06-3501
Eco-726-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O81:NM str. 02-3012
Eco-727-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O86:H34 str. 99-3124
Eco-728-1 to Eco-728-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O91
Eco-729-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O91:H14 str. 06-3691
Eco-730-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O91:H14 str. 2009C-3227
Eco-731-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O91:H21 str. 2009C-3740
Eco-732-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O91:H21 str. 2009C-4646
Eco-733-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> O91:NM str. 2009C-3745
Eco-734-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> PCN033
Eco-735-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> PCN061
Eco-736-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> RS218
Eco-737-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> STEC O174:H2 str. 02-04446
Eco-738-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> STEC O174:H46 str. I-151
Eco-739-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> STEC O174:H8 str. 02-07607
Eco-751-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> str. K-12 substr. MC4100
Eco-752-1 to Eco-752-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> str. K-12 substr. MG1655
Eco-740-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> UCI 51
Eco-741-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> UCI 53
Eco-742-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> UCI 57
Eco-743-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> UCI 58
Eco-744-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> UCI 65
Eco-745-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> UCI 66
Eco-746-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> VR50
Eco-749-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> Wa1
Eco-750-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> Wa2
Eco-747-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> WC1
Eco-748-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia coli</i> WC2
Ema-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia marmotae</i>
Esp-52-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia sp.</i> 3.2.53FAA
Esp-53-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia sp.</i> TW14182
Esp-54-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Escherichia sp.</i> TW15838
Fhe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Franconibacter helveticus</i>
Fhe-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Franconibacter helveticus</i> 1159
Fhe-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Franconibacter helveticus</i> 513
Fhe-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Franconibacter helveticus</i> LMG 23732
Fpu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Franconibacter pulveris</i>
Fpu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Franconibacter pulveris</i> 1160
Fpu-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Franconibacter pulveris</i> 601
Fpu-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Franconibacter pulveris</i> DSM 19144
Fpu-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Franconibacter pulveris</i> LMG 24059
Kae-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i>
Kae-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i> MGH 61
Kae-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i> MGH 62
Kae-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i> MGH 77
Kae-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i> MGH 78
Kae-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i> UCI 15
Kae-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i> UCI 16
Kae-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i> UCI 27
Kae-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i> UCI 28
Kae-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i> UCI 45
Kae-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i> UCI 46
Kae-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i> UCI 47
Kae-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella aerogenes</i> UCI 48
Kcf-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella cf. planticola</i> B43
Kmi-1-1 to Kmi-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella michiganensis</i>
Kmi-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella michiganensis</i> H1g
Kmi-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella michiganensis</i> HKOPL1
Kox-1-1 to Kox-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella oxytoca</i>
Kox-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella oxytoca</i> 09-7231

Kpn-223-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> SA1
Kpn-224-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> subsp. <i>pneumoniae</i> T69
Kpn-225-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> subsp. <i>rhinoscleromatis</i> SB3432
Kpn-170-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> T2-1-1
Kpn-171-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> T2-1-2
Kpn-172-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 17
Kpn-173-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 19
Kpn-174-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 20
Kpn-175-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 21
Kpn-176-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 22
Kpn-177-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 25
Kpn-178-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 26
Kpn-179-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 33
Kpn-180-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 34
Kpn-181-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 37
Kpn-182-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 38
Kpn-183-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 41
Kpn-184-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 42
Kpn-185-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 43
Kpn-186-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 44
Kpn-187-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 55
Kpn-188-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 56
Kpn-189-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 59
Kpn-190-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 60
Kpn-191-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 61
Kpn-192-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 62
Kpn-193-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 63
Kpn-194-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 64
Kpn-195-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 67
Kpn-196-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCI 68
Kpn-197-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCICRE 1
Kpn-198-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UCICRE 13
Kpn-199-1 to Kpn-199-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UHKPC 52
Kpn-200-1 to Kpn-200-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UHKPC05
Kpn-201-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UHKPC07
Kpn-202-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UHKPC33
Kpn-203-1 to Kpn-203-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> UHKPC45
Kpn-204-1 to Kpn-204-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella pneumoniae</i> VAKPC278
Kqu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella quasipneumoniae</i> subsp. <i>quasipneumoniae</i>
Kqu-2-1 to Kqu-2-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella quasipneumoniae</i> subsp. <i>similipneumoniae</i>
Ksp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i> sp. 10982
Ksp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i> sp. AS10
Ksp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i> sp. RIT-PI-d
Kva-1-1 to Kva-1-7	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella variicola</i>
Kas-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kluyvera ascorbata</i> ATCC 33433
Kcr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kluyvera cryocrescens</i>
Kor-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kosakonia oryzae</i>
Kra-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kosakonia radicincitans</i> UMEnt01/12
Kra-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kosakonia radicincitans</i> YD4
Lad-1-1 to Lad-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Leclercia adecarboxylata</i>
Lad-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Leclercia adecarboxylata</i> ATCC 23216 = NBRC 102595
Lsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Leclercia</i> sp. LK8
Lam-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Lelliottia amnigena</i> CHS 78
Msp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Mangrovibacter</i> sp. MFB070
Mma-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Metakosakonia massiliensis</i> JC163
Pge-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pluralibacter gergoviae</i>
Pvu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pseudeschерichia vulneris</i> NBRC 102420
Ror-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella ornithinolytica</i>
Ror-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella ornithinolytica</i> 2-156-04.S1.C1
Ror-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella ornithinolytica</i> 2-156-04.S1.C2
Ror-4-1 to Ror-4-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella ornithinolytica</i> B6
Rpl-1-1 to Rpl-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella planticola</i>
Rpl-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella planticola</i> ATCC 33531
Rte-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella terrigena</i>
Sbo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella bongori</i> serovar 48:z41:- str. RKS3044

Sfl-46-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06HN244
Sfl-47-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06HN250
Sfl-48-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06HN378
Sfl-49-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06SX36
Sfl-50-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Shi06SX53
Sfl-51-1 to Sfl-51-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>	Y
Sso-1-1 to Sso-1-547	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i>	
Sso-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i>	1DT-1
Sco-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Siccibacter colletis</i>	
Stu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Siccibacter turicensis</i>	LMG 23730
Tgu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Trabulsiella guamensis</i>	ATCC 49490
Tod-1-1 to Tod-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Trabulsiella odontotermis</i>	
Eam-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia amylovora</i>	NBRC 12687
Ebi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia billingiae</i>	
Ein-1-1 to Ein-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia iniecta</i>	
Ema-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia mallotivora</i>	
Eol-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia oleae</i>	
Esp-55-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia sp.</i>	9145
Etr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia tracheiphila</i>	
Ety-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Erwinia typographi</i>	
Pag-2-1 to Pag-2-6	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	<i>Pantoea agglomerans</i> group <i>Pantoea agglomerans</i>
Pag-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea</i>	<i>Pantoea agglomerans</i> group <i>Pantoea agglomerans</i> Eh318
Pan-1-1 to Pan-1-5	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea ananatis</i>	
Pan-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea ananatis</i>	BD442
Pan-3-1 to Pan-3-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea ananatis</i>	LMG 2665
Pan-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea ananatis</i>	Sd-1
Pan-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea anthophila</i>	
Pro-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea rodasi</i>	
Prw-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea rwandensis</i>	
Pse-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea septica</i>	
Psp-36-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea sp.</i>	3.5.1
Psp-37-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea sp.</i>	9140
Psp-38-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea sp.</i>	BL1
Psp-39-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea sp.</i>	CFSAN033090
Psp-40-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea sp.</i>	IMH
Psp-41-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea sp.</i>	MBLJ3
Psp-42-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea sp.</i>	NGS-ED-1003
Psp-43-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea sp.</i>	PSNIH1
Psp-44-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea sp.</i>	PSNIH2
Psp-45-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea sp.</i>	RIT-PI-b
Psp-46-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea sp.</i>	SM3
Pst-1-1 to Pst-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea stewartii</i>	
Pva-1-1 to Pva-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Pantoea vagans</i>	
Pfl-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Phaseolibacter flectens</i>	ATCC 12775
Tmo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Tatumella morbirosei</i>	
Tpt-1-1 to Tpt-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Tatumella ptyseos</i>	ATCC 33301
Tsa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Tatumella saanichensis</i>	
Tsp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Erwiniaceae	<i>Tatumella sp.</i>	UCD-D_suzukii
Ean-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella anguillarum</i>	ET070829
Ean-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella anguillarum</i>	ET080729
Ean-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella anguillarum</i>	ET080813
Ean-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella anguillarum</i>	ET081126R
Eho-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella hoshinae</i>	NBRC 105699 = ATCC 33379
Eic-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella ictaluri</i>	ATCC 33202
Epi-1-1 to Epi-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella piscicida</i>	
Esp-56-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella sp.</i>	EA181011
Eta-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella tarda</i>	
Eta-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella tarda</i>	ATCC 15947 = NBRC 105688
Eta-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Edwardsiella tarda</i>	DT
Hal-1-1 to Hal-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Hafnia alvei</i>	
Hal-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Hafnia alvei</i>	ATCC 13337
Hal-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Hafnia alvei</i>	FB1
Hpa-1-1 to Hpa-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Hafniaceae	<i>Hafnia paralvei</i>	
Aen-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Arsenophonus endosymbiont str.</i>	Hangzhou of Nilaparvata lugens
Ana-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganellaceae	<i>Arsenophonus nasoniae</i>	DSM 15247

Mwi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Moellerella wisconsensis</i>
Mmo-1-1 to Mmo-1-8	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Morganella morganii</i>
Mmo-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Morganella morganii</i> F675
Mmo-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Morganella morganii</i> H1r
Mmo-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Morganella morganii</i> IS15
Msp-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Morganella sp.</i> EGD-HP17
Pas-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Photorhabdus asymbiotica subsp. australis</i> DSM 17609
Plu-5-1 to Plu-5-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Photorhabdus luminescens</i>
Plu-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Photorhabdus luminescens</i> BA1
Plu-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Photorhabdus luminescens</i> NBAIL H75HRPL105
Plu-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Photorhabdus luminescens</i> NBAIL HiPL101
Plu-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Photorhabdus luminescens subsp. luminescens</i>
Pte-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Photorhabdus temperata subsp. kharii</i> NC19
Pte-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Photorhabdus temperata subsp. temperata</i> Meg1
Pte-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Photorhabdus temperata subsp. thracensis</i>
Pmi-1-1 to Pmi-1-6	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Proteus mirabilis</i>
Pvu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Proteus vulgaris</i>
Pal-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Providencia alcalifaciens</i> 205/92
Pal-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Providencia alcalifaciens</i> F90-2004
Pal-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Providencia alcalifaciens</i> PAL-1
Pal-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Providencia alcalifaciens</i> PAL-2
Pal-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Providencia alcalifaciens</i> PAL-3
Pal-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Providencia alcalifaciens</i> R90-1475
Pal-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Providencia alcalifaciens</i> RIMD 1656011
Pre-1-1 to Pre-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Providencia rettgeri</i>
Pst-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Providencia stuartii</i>
Xbo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus bovienii</i>
Xbo-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus bovienii str. feltiae</i> Florida
Xbo-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus bovienii str. feltiae</i> France
Xbo-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus bovienii str. feltiae</i> Moldova
Xbo-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus bovienii str. Intermedium</i>
Xbo-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus bovienii str. Jollieti</i>
Xbo-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus bovienii str. kraussei</i> Becker Underwood
Xbo-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus bovienii str. kraussei</i> Quebec
Xbo-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus bovienii str. oregonense</i>
Xbo-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus bovienii str. puntauense</i>
Xca-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus cabanillasii</i> JM26
Xdo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus doucetiae</i>
Xgr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus griffiniae</i>
Xkh-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus khoisanae</i>
Xne-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus nematophila</i>
Xne-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus nematophila</i> AN6/1
Xpo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus poimarii</i> G6
Xsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus sp.</i> NBAIL XenSa04
Xsz-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Morganeliaceae	<i>Xenorhabdus szentirmai</i> DSM 16338
Bgo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Brenneria goodwinii</i>
Dch-1-1 to Dch-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya chrysanthemi</i>
Dch-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya chrysanthemi</i> NCPPB 3533
Dch-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya chrysanthemi</i> NCPPB 402
Dch-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya chrysanthemi</i> NCPPB 516
Dda-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya dadantii</i> NCPPB 3537
Dda-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya dadantii</i> NCPPB 898
Dda-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya dadantii subsp. dieffenbachiae</i> NCPPB 2976
Ddi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya dianthicola</i> IPO 980
Ddi-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya dianthicola</i> RNS04.9
Dso-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya solani</i>
Dsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya sp.</i> 2B12
Dsp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya sp.</i> B16
Dsp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya sp.</i> DW 0440
Dsp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya sp.</i> MK7
Dsp-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya sp.</i> NCPPB 3274
Dsp-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya sp.</i> S1
Dze-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya zeae</i> CSL RW192
Dze-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya zeae</i> DZ2Q
Dze-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya zeae</i> EC1

Dze-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya zeae</i> MK19
Dze-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya zeae</i> NCPPB 2538
Dze-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Dickeya zeae</i> NCPPB 3531
Lqu-1-1 to Lqu-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Lonsdalea quercina</i> subsp. <i>quercina</i>
Pat-2-1 to Pat-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium atrosepticum</i>
Pat-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium atrosepticum</i> CFBP 6276
Pbe-1-1 to Pbe-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium betavascolorum</i>
Pca-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i>
Pca-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>actinidiae</i>
Pca-3-1 to Pca-3-15	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>brasiliense</i>
Pca-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>brasiliensis</i> ICMP 19477
Pca-5-1 to Pca-5-11	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>carotovorum</i>
Pca-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>carotovorum</i> ICMP 5702
Pca-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>carotovorum</i> UGC32
Pca-8-1 to Pca-8-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium carotovorum</i> subsp. <i>odoriferum</i>
Ppa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium parmentieri</i>
Ppa-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium parmentieri</i> CFIA1002
Ppo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium polaris</i>
Pwa-1-1 to Pwa-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Pectobacterium wasabiae</i>
CSo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Sodalis Candidatus Sodalis pierantonius</i> str. SOPE
Spr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Pectobacteriaceae	<i>Sodalis praecaptivus</i>
Pur-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	unclassified	Enterobacteriales <i>Phytobacter ursingii</i>
Psh-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	unclassified	Enterobacteriales <i>Plesiomonas shigelloides</i>
Psp-47-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	unclassified	Enterobacteriales <i>Plesiomonas</i> sp. ZOR0011
Cmu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Chania multitudinisentens</i> RB-25
Eam-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Ewingella americana</i> ATCC 33852
Raq-1-1 to Raq-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Rahnella aquatilis</i>
Raq-2-1 to Raq-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Rahnella aquatilis</i> CIP 78.65 = ATCC 33071
Rsp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Rahnella</i> sp. WP5
Rch-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Rouxiiella chamberiensis</i>
Sfo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia fonticola</i>
Sfo-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia fonticola</i> LMG 7882
Sfo-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia fonticola</i> UTAD54
Sgr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia grimesii</i>
Sli-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia liquefaciens</i>
Sli-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia liquefaciens</i> FK01
Sma-3-1 to Sma-3-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i>
Sma-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> AB42556419-isolate1
Sma-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> BIDMC 44
Sma-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> BIDMC 50
Sma-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> BIDMC 80
Sma-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> BIDMC 81
Sma-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> H1q
Sma-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> LCT-SM166
Sma-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> LCT-SM262
Sma-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> MC458
Sma-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> MC459
Sma-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> MC460
Sma-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> MC6000
Sma-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> MC6001
Sma-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> MC620
Sma-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> PH1a
Sma-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> SM39
Sma-20-1 to Sma-20-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> subsp. <i>marcescens</i>
Sma-21-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> subsp. <i>marcescens</i> ATCC 13880
Sma-22-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia marcescens</i> subsp. <i>marcescens</i> Db11
Sne-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia nematodiphila</i> DZ0503SBS1
Spl-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia plymuthica</i> RVH1
Ssp-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. 506.PEND
Ssp-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. Ag1
Ssp-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. Ag2
Ssp-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. DD3
Ssp-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. FS14
Ssp-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. H1n
Ssp-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia</i> sp. H1w

Ssp-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia sp.</i> SCBI
Ssp-20-1 to Ssp-20-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia sp.</i> TEL
Ssy-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia symbiotica</i>
Sur-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Serratia ureilytica</i>
Yal-1-1 to Yal-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia aldovae</i>
Yal-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia aldovae</i> 670-83
Yal-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia aleksiciae</i>
Ybe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia bercovieri</i>
Yen-1-1 to Yen-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i>
Yen-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i> (type O:2) str. YE3094/96
Yen-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i> (type O:5) str. YE53/03
Yen-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i> (type O:9) str. YE56/03
Yen-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> 556/8265
Yen-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> 647/5307
Yen-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> YO527
Yfr-1-1 to Yfr-1-17	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia frederiksenii</i>
Yfr-2-1 to Yfr-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia frederiksenii</i> ATCC 33641
Yfr-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia frederiksenii</i> Y225
Yin-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia intermedia</i>
Ykr-1-1 to Ykr-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia kristensenii</i>
Yma-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia massiliensis</i>
Yma-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia massiliensis</i> CCUG 53443
Ymo-1-1 to Ymo-1-7	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia mollaretii</i>
Ynu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia nurmii</i>
Ype-1-1 to Ype-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pekkanenii</i>
Ype-2-1 to Ype-2-9	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i>
Ype-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 1045
Ype-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 12
Ype-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 1412
Ype-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 1413
Ype-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 14735
Ype-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 1522
Ype-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 164
Ype-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 1670
Ype-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 2
Ype-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 2944
Ype-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 3067
Ype-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 34008
Ype-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 34202
Ype-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 351001
Ype-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 3770
Ype-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 42095
Ype-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 5
Ype-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 620024
Ype-21-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 71021
Ype-22-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 710317
Ype-23-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 7338
Ype-24-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 790
Ype-25-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 8787
Ype-26-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 9
Ype-27-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 945
Ype-28-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> 970754
Ype-29-1 to Ype-29-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> A1122
Ype-30-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> A1973001
Ype-31-1 to Ype-31-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> Angola
Ype-32-1 to Ype-32-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> Antiqua
Ype-104-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> biovar Orientalis str. AS200901156
Ype-105-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> biovar Orientalis str. AS200901434
Ype-106-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> biovar Orientalis str. AS200901509
Ype-107-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> biovar Orientalis str. AS200901539
Ype-108-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> biovar Orientalis str. AS200902147
Ype-109-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> biovar Orientalis str. BA200901703
Ype-110-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> biovar Orientalis str. BA200901799
Ype-111-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> biovar Orientalis str. BA200901990
Ype-112-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> biovar Orientalis str. BA200902009

Ype-113-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> str. Pestoides B
Ype-114-1 to Ype-114-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> subsp. <i>microtus</i> bv. Ulegeica
Ype-115-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> subsp. <i>pestis</i> bv. Orientalis
Ype-98-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> YN1065
Ype-99-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> YN1683
Ype-100-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> YN2179
Ype-101-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> YN2588
Ype-102-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> YN472
Ype-103-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pestis</i> YN663
Yps-1-1 to Yps-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i>
Yps-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i> B-6796
Yps-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i> B-6862
Yps-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i> B-6863
Yps-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i> B-6864
Yps-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i> B-6865
Yps-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i> B-6866
Yps-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i> B-7194
Yps-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i> B-7195
Yps-10-1 to Yps-10-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i> IP 32953
Yps-11-1 to Yps-11-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i> PB1/+
Yps-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i> str. PA3606
Yps-12-1 to Yps-12-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia pseudotuberculosis</i> YPIII
Yro-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia rohdei</i>
Yru-1-1 to Yru-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia ruckeri</i>
Yru-2-1 to Yru-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia ruckeri</i> ATCC 29473
Ysi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia similis</i>
Ywa-1-1 to Ywa-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Yersiniaceae	<i>Yersinia wautersii</i>
CRe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	aphid secondary symbionts <i>Candidatus</i> Regiella insecticola LSR1
Bsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Brenneria</i> sp. EniD312
Cda-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cedecea davisae</i> DSM 4568
Cfr-1-1 to Cfr-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter Citrobacter freundii complex <i>Citrobacter freundii</i>
Cfr-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter Citrobacter freundii complex <i>Citrobacter freundii</i>
						4.7.47CFAA
Cfr-2-1 to Cfr-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter Citrobacter freundii complex <i>Citrobacter freundii</i> ATCC 8090 = MTCC 1658
Cfr-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter Citrobacter freundii complex <i>Citrobacter freundii</i> GTC 09479
Cfr-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter Citrobacter freundii complex <i>Citrobacter freundii</i> GTC 09629
Cko-1-1 to Cko-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter koseri</i>
Cko-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter koseri</i> ATCC BAA-895
Cro-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter rodentium</i> ICC168
Csp-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter</i> sp. 30_2
Csp-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter</i> sp. A1
Csp-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter</i> sp. KTE151
Csp-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter</i> sp. KTE30
Csp-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter</i> sp. KTE32
Csp-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter</i> sp. L17
Cyo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Citrobacter youngae</i> ATCC 29220
Cco-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter condimenti</i> 1330
Cdu-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter dublinensis</i> 1210
Cdu-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter dublinensis</i> 582
Cma-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter malonaticus</i> 507
Cma-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter malonaticus</i> 681
Csa-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> 680
Csa-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> 696
Csa-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> 701
Csa-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> ATCC BAA-894
Csa-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> CMCC 45402
Csa-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> E899
Csa-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> ES15
Csa-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter sakazakii</i> SP291
Ctu-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter turicensis</i> 564

Ctu-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter turicensis</i> z3032
Cun-1-1 to Cun-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Cronobacter universalis</i> NCTC 9529
Dda-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya dadantii</i> 3937
Dda-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya dadantii</i> Ech586
Ddi-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya dianthicola</i> GBBC 2039
Ddi-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya dianthicola</i> NCPPB 3534
Ddi-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya dianthicola</i> NCPPB 453
Dpa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya paradisiaca</i> NCPPB 2511
Dso-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya solani</i> GBBC 2040
Dso-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya solani</i> IPO 2222
Dso-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya solani</i> MK10
Dso-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya solani</i> MK16
Dso-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya solani</i> RNS 08.23.3.1.A
Dsp-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya sp.</i> CSL RW240
Dsp-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya sp.</i> D s0432-1
Dsp-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya sp.</i> NCPPB 569
Dze-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya zeae</i> MS1
Dze-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya zeae</i> NCPPB 3532
Dze-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Dickeya zeae</i> ZJU1202
Eic-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Edwardsiella ictaluri</i> 93-146
Eta-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Edwardsiella tarda</i> ATCC 23685
Eta-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Edwardsiella tarda</i> C07-087
Eta-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Edwardsiella tarda</i> EIB202
Eta-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Edwardsiella tarda</i> FL6-60
Eta-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Edwardsiella tarda</i> NBRC 105688
Eae-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter aerogenes</i> EA1509E
Eae-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter aerogenes</i> FGI35
Eae-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter aerogenes</i> KCTC 2190
Eca-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Enterobacter cancerogenus</i> ATCC 35316
Eas-1-1 to Eas-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter Enterobacter cloacae complex <i>Enterobacter asburiae</i>
Eas-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter Enterobacter cloacae complex <i>Enterobacter asburiae</i> LF7a
Ecl-1-1 to Ecl-1-12	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae</i>
Ecl-55-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae</i> BWH
Ecl-56-1						29 Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae</i> BWH
Ecl-57-1						31 Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae</i>
Ecl-58-1						EC_38VIM1 Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae</i>
Ecl-59-1						EcWSU1 Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae</i> S611
Ecl-60-1						Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae</i> SCF1
Ecl-66-1						Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae str.</i>
Ecl-52-1 to Ecl-52-5						Hanford Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae subsp.</i>
Ecl-67-1						<i>cloacae</i> Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae subsp.</i>
Ecl-68-1						<i>cloacae</i> 08XA1 Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae subsp.</i>
Ecl-69-1						<i>cloacae</i> ATCC 13047 Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae subsp.</i>
Ecl-70-1						<i>cloacae</i> ENHKU01 Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae subsp.</i>
Ecl-61-1						<i>dissolvens</i> SDM Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae</i> UCI-
Ecl-62-1						CRE 11 Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Enterobacter Enterobacter cloacae complex <i>Enterobacter cloacae</i> UCI-
						CRE 12

Ecl-63-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter cloacae</i> UCI-CRE 3
Ecl-64-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter cloacae</i> UCI-CRE 5
Ecl-65-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter cloacae</i> UCI-CRE 9
Eho-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter hormaechei</i> ATCC 49162
Eho-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter hormaechei</i> YT2
Eho-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter hormaechei</i> YT3
Esp-57-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter sp.</i> MGH 14
Esp-58-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter sp.</i> MGH 16
Esp-59-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter sp.</i> MGH 22
Esp-60-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter sp.</i> MGH 23
Esp-61-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter sp.</i> MGH 24
Esp-62-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter sp.</i> MGH 25
Esp-63-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter sp.</i> MGH 26
Esp-64-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter sp.</i> MGH 34
Esp-65-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter sp.</i> MGH 38
Esp-66-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter	Enterobacter cloacae complex	<i>Enterobacter sp.</i> MGH 8
Emo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Enterobacter mori</i> LMG 25706
Esp-67-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Enterobacter sp.</i> 638
Esp-68-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Enterobacter sp.</i> Ag1
Esp-69-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Enterobacter sp.</i> E20
Esp-70-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Enterobacter sp.</i> GN02454
Esp-71-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Enterobacter sp.</i> GN02457
Esp-72-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Enterobacter sp.</i> R4-368
Esp-73-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Enterobacter sp.</i> SST3
Eba-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Enterobacteriaceae bacterium</i> 9_2_54FAA
Eba-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Enterobacteriaceae bacterium</i> LSJC7
Eba-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Enterobacteriaceae bacterium strain</i> FGI 57
Eam-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> 01SFR-BO
Eam-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> ACW56400
Eam-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> ATCC 49946
Eam-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> CFBP 1232
Eam-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> CFBP 2585
Eam-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> CFBP1430
Eam-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> Ea266
Eam-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> Ea356
Eam-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> Ea644
Eam-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> LA635
Eam-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> LA636
Eam-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> LA637
Eam-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia amylovora</i> UPN527
Ebi-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia billingiae</i> Eb661
Epi-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia piriflorinivgrans</i> CFBP 5888
Epy-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia pyrifoliae</i> DSM 12163
Epy-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia pyrifoliae</i> Ep1/96
Esp-74-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia sp.</i> Ejp617
Eta-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia tasmaniensis</i> Et1/99
Eto-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia toletana</i> DAPP-PG 735
Etr-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Erwinia tracheiphila</i> PSU-1
Eal-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Escherichia albertii</i> TW07627
Eal-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Escherichia albertii</i> TW08933
Eal-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Escherichia albertii</i> TW15818
Ebl-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Escherichia blattae</i> DSM 4481
Eco-1-1 to Eco-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Escherichia coli</i>
Eco-753-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Escherichia coli</i> 0.1288
Eco-754-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Escherichia coli</i> 0.1304
Eco-755-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae			<i>Escherichia coli</i> 042

Pan-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea ananatis</i> PA13
Pdi-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea dispersa</i> EGD-AAK13
Psp-48-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> A4
Psp-54-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> aB
Psp-49-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> At-9b
Psp-50-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> GM01
Psp-52-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> Sc1
Psp-51-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> SL1.M5
Psp-53-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea sp.</i> YR343
Pst-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea stewartii subsp. indologenes</i>
Pst-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea stewartii subsp. stewartii</i> DC283
Pva-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea vagans</i> C9-1
Pat-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium atrosepticum</i> SCRI1043
Pca-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium carotovorum subsp. brasiliensis</i> PBR1692
Pca-5-1 to Pca-5-11	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium carotovorum subsp. carotovorum</i>
Pca-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium carotovorum subsp. carotovorum</i> PC1
Pca-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium carotovorum subsp. carotovorum</i> PCC21
Pca-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium carotovorum subsp. carotovorum</i> WPP14
Psp-55-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium sp.</i> SCC3193
Pwa-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium wasabiae</i> CFBP 3304
Pwa-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pectobacterium wasabiae</i> WPP163
Pas-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Photorhabdus asymbiotica</i>
Plu-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Photorhabdus luminescens subsp. laumondii</i> TTO1
Pte-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Photorhabdus temperata</i> J3
Pte-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Photorhabdus temperata subsp. temperata</i> M1021
Pst-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Plautia stali symbiont</i>
Psh-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Plesiomonas shigelloides</i> 302-73
Pha-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus hauseri</i> ZMd44
Pmi-1-1 to Pmi-1-6	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i>
Pmi-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> ATCC 29906
Pmi-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> BB2000
Pmi-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> C05028
Pmi-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> HI4320
Pmi-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> PR03
Pmi-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> WGLW4
Pmi-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Proteus mirabilis</i> WGLW6
Pal-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia alcalifaciens</i> Dmel2
Pal-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia alcalifaciens</i> DSM 30120
Pbu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia burhodogranariae</i> DSM 19968
Pre-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia rettgeri</i> Dmel1
Pre-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia rettgeri</i> DSM 1131
Pru-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia rustigianii</i> DSM 4541
Psn-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia sneebia</i> DSM 19967
Pst-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia stuartii</i> ATCC 25827
Pst-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Providencia stuartii</i> MRSN 2154
Raq-2-1 to Raq-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Rahnella aquatilis</i> CIP 78.65 = ATCC 33071
Raq-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Rahnella aquatilis</i> HX2
Rsp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Rahnella sp.</i> Y9602
Ror-4-1 to Ror-4-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella ornithinolytica</i> B6
Rpl-1-1 to Rpl-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Raoultella planticola</i>
Sbo-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella bongori</i> N268-08
Sbo-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella bongori</i> NCTC 12419
Sen-2-1 to Sen-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica</i>
Sen-311-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. arizonae serovar</i> 62:z4,z23:-
Sen-312-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. diarizonae serovar</i> 60:r:e,n,x,z15 str. 01-0170
Sen-313-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i> 4,[5],12:i:- str. 08-1700
Sen-314-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i> 4,[5],12:i:- str. 08-1736
Sen-315-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i> 4,[5],12:i:- str. 08-1739
Sen-316-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i> Agona str. 01.O.05
Sen-317-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i> Agona str. 02.O.05
Sen-318-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i> Agona str. 0292
Sen-319-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i> Agona str. 03.O.05
Sen-320-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i> Agona str. 0322
Sen-321-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Salmonella enterica subsp. enterica serovar</i> Agona str. 04.O.05

Sen-983-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM5
Sen-984-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM6
Sen-985-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM7
Sen-986-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM8
Sen-987-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. STM9
Sen-988-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. T000240
Sen-989-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. TN061786
Sen-990-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. U288
Sen-991-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. UK-1
Sen-992-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium str. USDA-ARS-USMARC-1899
Sen-993-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium var. 5- str. CFSAN001921
Sen-994-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium var. 5- str. CFSAN004345
Sen-995-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Typhimurium var. Copenhagen str. 0084
Sen-996-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Uganda str. R8-3404
Sen-997-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Urbana str. ATCC 9261
Sen-998-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Worthington str. ATCC 9607
Sen-999-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Agona <i>Salmonella enterica subsp. enterica serovar</i> Agona str. SL483
Sen-1000-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Choleraesuis str. SCSA50
Sen-1001-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Dublin str. CT_02021853
Sen-1002-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Gallinarum/pullorum str. RKS5078
Sen-1003-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Gallinarum str. 287/91
Sen-1004-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Hadar <i>Salmonella enterica subsp. enterica serovar</i> Hadar str. RI_05P066
Sen-1005-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Heidelberg str. B182
Sen-1006-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Heidelberg str. SL476
Sen-1007-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Heidelberg str. SL486
Sen-1008-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Kentucky str. CDC 191
Sen-1009-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Kentucky str. CVM29188
Sen-266-1 to Sen-266-2	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Newport str. SL254
Sen-1010-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Newport str. SL317
Sen-1011-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Paratyphi B str. SPB7
Sen-1012-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Saintpaul str. SARA23
Sen-1013-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Saintpaul str. SARA29

Sen-1014-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. enterica serovar Typhi <i>Salmonella enterica subsp. enterica serovar Typhi str. CT18</i>
Sen-1015-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. enterica serovar Typhi <i>Salmonella enterica subsp. enterica serovar Typhi str. E00-7866</i>
Sen-1016-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. enterica serovar Typhi <i>Salmonella enterica subsp. enterica serovar Typhi str. Ty2</i>
Sen-1017-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. enterica serovar Typhimurium <i>Salmonella enterica subsp. enterica serovar Typhimurium str. LT2</i>
Sen-1018-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Salmonella Salmonella enterica subsp. enterica serovar Virchow <i>Salmonella enterica subsp. enterica serovar Virchow str. SL491</i>
Sen-1019-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. houtenae</i>
Sen-1020-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. houtenae serovar 16:z4,z32:- str. RKS3027</i>
Sen-1021-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. houtenae serovar 50:g,z51:- str. 01-0133</i>
Sen-1022-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. houtenae str. ATCC BAA-1581</i>
Sen-1023-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. indica serovar 6,14,25:z10:1,(2),7 str. 1121</i>
Sen-1024-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. salamae serovar 58:l,z13,z28:z6 str. 00-0163</i>
Sen-1025-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. salamae str. 3588/07</i>
Sfo-4-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia fonticola AU-AP2C</i>
Sfo-5-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia fonticola AU-P3(3)</i>
Sli-3-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia liquefaciens ATCC 27592</i>
Sma-3-1 to Sma-3-4	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens</i>
Sma-23-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens EGD-HP20</i>
Sma-24-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens FGI94</i>
Sma-25-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens LCT-SM213</i>
Sma-26-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens VGH107</i>
Sma-27-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens W2.3</i>
Sma-28-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia marcescens WW4</i>
Sod-1-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia odorifera DSM 4582</i>
Spl-2-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia plymuthica 4Rx13</i>
Spl-3-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia plymuthica A30</i>
Spl-4-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia plymuthica AS9</i>
Spl-5-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia plymuthica PRI-2C</i>
Spl-6-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia plymuthica S13</i>
Spr-2-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia proteamaculans 568</i>
Ssp-21-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia sp. AS12</i>
Ssp-22-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia sp. AS13</i>
Ssp-23-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia sp. ATCC 39006</i>
Ssp-24-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia sp. M24T3</i>
Ssp-25-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia sp. S4</i>
Ssy-2-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Serratia Serratia symbiotica str. Tucson</i>
Sbo-2-1 to Sbo-2-10	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii</i>
Sbo-5-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 08-0009</i>
Sbo-6-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 08-0280</i>
Sbo-7-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 08-2671</i>
Sbo-8-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 08-2675</i>
Sbo-9-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 08-6341</i>
Sbo-10-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 09-0344</i>
Sbo-11-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 248-1B</i>
Sbo-12-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 4444-74</i>
Sbo-13-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii 5216-82</i>
Sbo-14-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii ATCC 9905</i>
Sbo-15-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii CDC 3083-94</i>
Sbo-16-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii S6614</i>
Sbo-17-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii S7334</i>
Sbo-18-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella boydii Sb227</i>
Sdy-3-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella dysenteriae 1012</i>
Sdy-4-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella dysenteriae 225-75</i>
Sdy-5-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella dysenteriae 4</i>
Sdy-6-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella dysenteriae CDC 74-1112</i>
Sdy-7-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella dysenteriae S6554</i>
Sdy-8-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella dysenteriae Sd197</i>
Sdy-9-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella dysenteriae WRSd3</i>
Sdy-10-1	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Shigella dysenteriae WRSd5</i>

Sfl-1-1 to Sfl-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i>
Sfl-52-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2001020
Sfl-53-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2002017
Sfl-54-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2002028
Sfl-55-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2002106
Sfl-56-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2003035
Sfl-57-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2003036
Sfl-58-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2005002
Sfl-59-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2005025
Sfl-60-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2005184
Sfl-61-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2930-71
Sfl-25-1 to Sfl-25-14	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2a
Sfl-62-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2a str. 2457T
Sfl-63-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 2a str. 301
Sfl-64-1 to Sfl-64-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 3a
Sfl-65-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 4343-70
Sfl-66-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 5 str. 8401
Sfl-67-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 51581
Sfl-68-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 5a str. M90T
Sfl-69-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> 6
Sfl-70-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> CCH060
Sfl-71-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> CDC 796-83
Sfl-72-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> G1663
Sfl-73-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> MT1457
Sfl-74-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S5644
Sfl-75-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S5717
Sfl-76-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S6162
Sfl-77-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S6585
Sfl-78-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S6678
Sfl-79-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S6764
Sfl-80-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> S7737
Sfl-81-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> Shi06GS02
Sfl-82-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> Shi06HN006
Sfl-83-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> Shi06HN344
Sfl-84-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> Shi06HN347
Sfl-85-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> VA-6
Sfl-51-1 to Sfl-51-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella flexneri</i> Y
Sso-1-1 to Sso-1-547	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i>
Sso-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 08-7761
Sso-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 08-7765
Sso-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 09-1032
Sso-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 09-2245
Sso-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 09-4962
Sso-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 3233-85
Sso-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 4822-66
Sso-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> 53G
Sso-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> S6513
Sso-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> Ss046
Sso-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella sonnei</i> str. Moseley
Ssp-26-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shigella</i> sp. D9
Sbl-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Shimwellia blattae</i> DSM 4481 = NBRC 105725
Sgl-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Sodalis glossinidius</i> str. 'morsitans'
Xbo-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Xenorhabdus bovienii</i> SS-2004
Xne-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Xenorhabdus nematophila</i> ATCC 19061
Xne-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Xenorhabdus nematophila</i> F1
Xne-5-1 to Xne-5-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Xenorhabdus nematophila</i> str. Anatoliense
Xne-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Xenorhabdus nematophila</i> str. Websteri
Yal-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia aldovae</i> ATCC 35236
Ybe-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia bercovieri</i> ATCC 43970
Yen-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> (type O:3) str. YE12/03
Yen-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> (type O:5,27) str. YE149/02
Yen-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> (type O:9) str. YE212/02
Yen-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> IP 10393
Yen-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> IP2222
Yen-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> NFO

Yen-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>enterocolitica</i> 8081
Yen-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>enterocolitica</i> WA-314
Yen-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> 105.5R(r)
Yen-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> PhRBD_Ye1
Yen-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> Y11
Yen-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> YE-149
Yen-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> YE-150
Yen-21-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> YE-P1
Yen-22-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia enterocolitica</i> subsp. <i>palaearctica</i> YE-P4
Yfr-2-1 to Yfr-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia frederiksenii</i> ATCC 33641
Yin-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia intermedia</i> ATCC 29909
Ykr-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia kristensenii</i> ATCC 33638
Ymo-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia mollaretii</i> ATCC 43969
Ype-116-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 113
Ype-117-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 2330
Ype-118-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 2501
Ype-119-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 2504
Ype-120-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 2506
Ype-121-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 30017
Ype-122-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 42013
Ype-123-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 42091
Ype-124-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 5761
Ype-125-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 7
Ype-126-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 735
Ype-127-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 780441
Ype-128-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> 91
Ype-29-1 to Ype-29-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> A1122
Ype-129-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> A1956001
Ype-31-1 to Ype-31-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> Angola
Ype-32-1 to Ype-32-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> Antiqua
Ype-218-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis biovar</i> Antiqua str. B42003004
Ype-219-1 to Ype-219-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis biovar</i> Antiqua str. E1979001
Ype-220-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis biovar</i> Antiqua str. UG05-0454
Ype-221-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis biovar</i> Mediaevalis str. K1973002
Ype-222-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis biovar</i> Mediaevalis str. Harbin 35
Ype-223-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis biovar</i> Microtus str. 91001
Ype-224-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis biovar</i> Orientalis str. F1991016
Ype-226-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis biovar</i> Orientalis str. India 195
Ype-225-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis biovar</i> Orientalis str. IP275
Ype-227-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis biovar</i> Orientalis str. MG05-1020
Ype-228-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis biovar</i> Orientalis str. PEXU2
Ype-130-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> C1976001
Ype-131-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> C1989001
Ype-132-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CA88-4125
Ype-133-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC125002
Ype-134-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC348002
Ype-135-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC49003
Ype-136-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC64001
Ype-137-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC8211
Ype-138-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC87001
Ype-139-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC91090
Ype-140-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC93014
Ype-141-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CMCC96001
Ype-142-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> CO92
Ype-143-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> D106004
Ype-144-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> D182038
Ype-145-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> D1982001
Ype-146-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> FV-1
Ype-147-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> G1996006
Ype-148-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> G1996010
Ype-149-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> G8786
Ype-150-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> H1959004
Ype-151-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> INS
Ype-152-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> K11973002
Ype-153-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pestis</i> KIM

Yps-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pseudotuberculosis</i> IP 31758
Yps-10-1 to Yps-10-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pseudotuberculosis</i> IP 32953
Yps-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pseudotuberculosis</i> NBRC 105692
Yps-11-1 to Yps-11-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pseudotuberculosis</i> PB1/+
Yps-12-1 to Yps-12-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia pseudotuberculosis</i> YPIII
Yro-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia rohdei</i> ATCC 43380
Yru-1-1 to Yru-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia ruckeri</i>
Yru-2-1 to Yru-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Yersinia ruckeri</i> ATCC 29473
Gpe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria			<i>Gallaecimonas pentaromativorans</i>
Gxi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria			<i>Gallaecimonas xiamenensis</i> 3-C-1
gpr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria			gamma proteobacterium WG36
Aca-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus capsulatus</i> DSM 19761
Aeq-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus equuli</i> subsp. <i>equuli</i>
Ami-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus minor</i> 202
Ami-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus minor</i> NM305
Apl-1-1 to Apl-1-6	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i>
Apl-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> L20
Apl-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> S8
Apl-4-1 to Apl-4-2	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> serovar 1 str. 4074
Apl-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> serovar 10 str. D13039
Apl-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> serovar 11 str. 56153
Apl-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> serovar 12 str. S1536
Apl-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> serovar 13 str. N273
Apl-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> serovar 2 str. 4226
Apl-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> serovar 2 str. S1536
Apl-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> serovar 3 str. JL03
Apl-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> serovar 4 str. M62
Apl-13-1 to Apl-13-2	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> serovar 6 str. Femo
Apl-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> serovar 7 str. AP76
Apl-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus pleuropneumoniae</i> serovar 9 str. CVJ13261
Asu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus succinogenes</i> 130Z
Asu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus suis</i> ATCC 33415
Asu-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus suis</i> H91-0380
Aur-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Actinobacillus ureae</i> ATCC 25976
Aac-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> ANH9381
Aac-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> D17P-3
Aac-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> D7S-1
Aac-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> DSM 8324
Aac-5-1 to Aac-5-2	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> HK1651
Aac-6-1 to Aac-6-2	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> RhAA1
Aac-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype a str. A160
Aac-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype a str. H5P1
Aac-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype b str. I23C
Aac-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype b str. S23A
Aac-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype b str. SCC1398
Aac-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype b str. SCC4092
Aac-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype c str. AAS4A
Aac-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype c str. D17P-2
Aac-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype c str. SCC2302
Aac-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype d str. I63B
Aac-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype e str. SC1083
Aac-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype e str. SCC393
Aac-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> serotype f str. D18P1
Aac-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter actinomycetemcomitans</i> Y4
Aap-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter aphrophilus</i>
Aap-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter aphrophilus</i> ATCC 33389
Aap-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter aphrophilus</i> F0387
Aap-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter aphrophilus</i> NJ8700
Ase-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter segnis</i>
Ase-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter segnis</i> ATCC 33393
Asp-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter</i> sp. oral taxon 458 str. W10330
Apa-1-1 to Apa-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Avibacterium paragallinarum</i>
Apa-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Avibacterium paragallinarum</i> 221
Apa-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Avibacterium paragallinarum</i> 72
Apa-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Avibacterium paragallinarum</i> JF4211

Cor-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Chelonobacter oris</i>
Hae-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus aegyptius</i> ATCC 11116
Hha-1-1 to Hha-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus haemolyticus</i>
Hha-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus haemolyticus</i> HK386
Hha-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus haemolyticus</i> M19501
Hha-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus haemolyticus</i> M21127
Hha-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus haemolyticus</i> M21621
Hha-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus haemolyticus</i> M21639
Hin-1-1 to Hin-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i>
Hin-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> 10810
Hin-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> 2019
Hin-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> 3655
Hin-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> 60294N1
Hin-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> 6P18H1
Hin-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> 7P49H1
Hin-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> 86-028NP
Hin-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> CGSHiCZ412602
Hin-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> F3031
Hin-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> F3047
Hin-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> KR494
Hin-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> NT127
Hin-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> PittAA
Hin-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> PittEE
Hin-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> PittHH
Hin-17-1 to Hin-17-2	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> PittII
Hin-18-1 to Hin-18-2	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> R2846
Hin-19-1 to Hin-19-2	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> R2866
Hin-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> Rd KW20
Hin-21-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus influenzae</i> RdAW
Hma-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus massiliensis</i>
Hpa-2-1 to Hpa-2-11	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus parainfluenzae</i>
Hpa-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus parainfluenzae</i> ATCC 33392
Hpa-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus parainfluenzae</i> HK2019
Hpa-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus parainfluenzae</i> HK262
Hpa-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus parainfluenzae</i> T3T1
Hpa-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus paraphrohaemolyticus</i> HK411
Hsp-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus sp.</i> FF7
Hsp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus sp. oral taxon</i> 851 str. F0397
Hsp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus sputorum</i> CCUG 13788
Hsp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Haemophilus sputorum</i> HK 2154
Mgr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Mannheimia granulomatis</i> DSM 19156
Mha-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Mannheimia haemolytica serotype</i> A1/A6 str. PKL10
Mma-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Mannheimia massilioguelmaensis</i>
Msu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Mannheimia succiniciproducens</i> MBEL55E
Mmu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Muribacter muris</i>
Nro-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Necropsobacter rosorum</i>
Pbe-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella bettyae</i> CCUG 2042
Pda-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella dagmatis</i> ATCC 43325
Pmu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida</i>
Pmu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida</i> 1500C
Pmu-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida</i> 1500E
Pmu-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida</i> 2000
Pmu-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida</i> 36950
Pmu-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida</i> 671/90
Pmu-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida</i> 93002
Pmu-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida</i> OH1905
Pmu-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida</i> P1933
Pmu-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida</i> R1IF
Pmu-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida subsp. gallicida</i> P1059
Pmu-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida subsp. gallicida</i> X73
Pmu-13-1 to Pmu-13-12	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida subsp. multocida</i>
Pmu-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida subsp. multocida</i> OH4807
Pmu-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida subsp. multocida</i> P1062
Pmu-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida subsp. multocida str.</i> 3480
Pmu-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida subsp. multocida str.</i> HB03

Pmu-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida subsp. multocida str.</i> HN06
Pmu-21-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida subsp. multocida str.</i> Pm70
Pmu-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida subsp. multocida str.</i> PMTB
Pmu-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella multocida subsp. multocida</i> VTCCBAA264
Ppn-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella pneumotropica</i> DSM 21403
Psp-56-1 to Psp-56-3	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella sp.</i> FF6
Rpn-1-1 to Rpn-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Rodentibacter pneumotropicus</i>
Vba-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	unclassified Vibrionales	<i>Vibrionales bacterium</i> SWAT-3
Afi-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Aliivibrio fischeri</i>
Afi-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Aliivibrio fischeri</i> ZF-211
Alo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Aliivibrio logei</i> 5S-186
Alo-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Aliivibrio logei</i> ATCC 35077
Asa-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Aliivibrio salmonicida</i> LFI1238
Awo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Aliivibrio wodanis</i>
Vfi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Aliivibrio Vibrio fischeri</i> ES114
Vfi-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Aliivibrio Vibrio fischeri</i> MJ11
Vfi-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Aliivibrio Vibrio fischeri</i> SR5
Eca-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Enterovibrio calviensis</i> 1F-211
Eca-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Enterovibrio calviensis</i> 1F-230
Eca-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Enterovibrio calviensis</i> DSM 14347
Eca-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Enterovibrio calviensis</i> FF-85
Eno-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Enterovibrio norvegicus</i> FF-162
Eno-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Enterovibrio norvegicus</i> FF-33
Eno-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Enterovibrio norvegicus</i> FF-454
Gho-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Grimontia hollisae</i> CIP 101886
Gsp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Grimontia sp.</i> AD028
Gsp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Grimontia sp.</i> AK16
Pan-11-1 to Pan-11-12	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium angustum</i>
Pan-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium angustum</i> S14
Pap-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium aphoticum</i>
Paq-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium aquae</i>
Pda-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium damsela subsp. damsela</i>
Pda-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium damsela subsp. damsela</i> CIP 102761
Pda-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium damsela subsp. piscicida</i> DI21
Pga-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium gaetbulicola</i>
Pga-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium gaetbulicola</i> Gung47
Pga-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium galathea</i>
Pga-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium ganghwense</i>
Pha-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium halotolerans</i>
Pha-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium halotolerans</i> DSM 18316
Pil-1-1 to Pil-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium iliopiscarium</i>
Pki-1-1 to Pki-1-5	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium kishitanii</i>
Ple-1-1 to Ple-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium leiognathi</i>
Ple-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium leiognathi lriyu.4.1</i>
Ple-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium leiognathi subsp. mandapamensis svers.1.1</i>
Pph-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium phosphoreum</i>
Ppr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium profundum</i> 3TCK
Ppr-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium profundum</i> SS9
Psa-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium sanctipauli</i>
Psp-57-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium sp.</i> AK15
Psp-58-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium sp.</i> SKA34
Psw-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Photobacterium swingsii</i>
Sco-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Salinivibrio costicola subsp. costicola</i> ATCC 33508 = LMG 11651
Sso-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Salinivibrio socompensis</i> S10B
Sso-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Salinivibrio socompensis</i> S35
Ssp-27-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Salinivibrio sp.</i> KP-1
Lan-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio Listonella anguillarum</i> M3
Val-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio albensis</i> ATCC 14547
Val-2-1 to Val-2-9	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio alginolyticus</i>
Val-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio alginolyticus</i> 12G01
Val-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio alginolyticus</i> 40B
Val-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio alginolyticus</i> E0666
Val-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio alginolyticus</i> NBRC 15630 = ATCC 17749
Van-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio anguillarum</i>
Van-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio anguillarum</i> 775

Van-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio anguillarum</i> 96F
Van-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio anguillarum</i> RV22
Vaz-1-1 to Vaz-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio azureus</i> NBRC 104587
Vbr-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio brasiliensis</i> LMG 20546
Vbr-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio breoganii</i> 1C10
Vbr-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio breoganii</i> ZF-29
Vbr-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio breoganii</i> ZF-55
Vca-1-1 to Vca-1-10	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio campbellii</i>
Vca-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio campbellii</i> 200612B
Vca-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio campbellii</i> ATCC BAA-1116
Vca-4-1 to Vca-4-2	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio campbellii</i> CAIM 519 = NBRC 15631
Vca-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio campbellii</i> DS40M4
Vca-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio caribbeanicus</i>
Vca-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio caribbenthicus</i> ATCC BAA-2122
Vch-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholera</i> CIRS 101
Vch-2-1 to Vch-2-4	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i>
Vch-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> 12129(1)
Vch-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> 1587
Vch-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> 2011EL-301
Vch-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> 2012EL-1759
Vch-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> 2740-80
Vch-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> 4260B
Vch-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> 623-39
Vch-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> AM-19226
Vch-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> ATCC 14035
Vch-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> B33
Vch-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> BJG-01
Vch-197-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> bv. <i>albensis</i> VL426
Vch-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> BX 330286
Vch-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1030(3)
Vch-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1032(5)
Vch-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1033(6)
Vch-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1035(8)
Vch-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1037(10)
Vch-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1038(11)
Vch-21-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1040(13)
Vch-22-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1041(14)
Vch-23-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1042(15)
Vch-24-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1044(17)
Vch-25-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1046(19)
Vch-26-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1047(20)
Vch-27-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1048(21)
Vch-28-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1050(23)
Vch-29-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1110
Vch-30-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1111
Vch-31-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1112
Vch-32-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1113
Vch-33-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1114
Vch-34-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1115
Vch-35-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1116
Vch-36-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CP1117
Vch-37-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> CT 5369-93
Vch-38-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> E306
Vch-39-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> H1
Vch-40-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> HC-02A1
Vch-41-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> HC-02C1
Vch-42-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> HC-06A1
Vch-43-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> HC-17A1
Vch-44-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> HC-17A2
Vch-45-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> HC-19A1
Vch-46-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> HC-1A2
Vch-47-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> HC-20A2
Vch-48-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> HC-21A1
Vch-49-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> HC-22A1
Vch-50-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> HC-23A1

Vch-182-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> PhVC-311
Vch-183-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> PhVC-326
Vch-184-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> PhVE-5
Vch-181-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> PS15
Vch-185-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> RC27
Vch-186-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> RC385
Vch-187-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> RC9
Vch-188-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> TM 11079-80
Vch-189-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> TMA 21
Vch-190-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> V51
Vch-191-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> V52
Vch-192-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> VC1761
Vch-193-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> VC35
Vch-194-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> VC4370
Vch-195-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> VCC19
Vch-196-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cholerae</i> ZWU0020
Vco-1-1 to Vco-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio coralliilyticus</i>
Vco-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio coralliilyticus</i> ATCC BAA-450
Vco-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio coralliilyticus</i> P1
Vcr-1-1 to Vcr-1-6	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio crassostreae</i>
Vcr-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio crassostreae</i> 9CS106
Vcr-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio crassostreae</i> 9ZC13
Vcr-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio crassostreae</i> 9ZC77
Vcr-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio crassostreae</i> 9ZC88
Vcr-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio crassostreae</i> ZF-91
Vcy-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> 1F111
Vcy-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> 1F175
Vcy-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> 1F273
Vcy-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> 1F289
Vcy-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> 1F53
Vcy-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> 1F97
Vcy-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> FF160
Vcy-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> FF274
Vcy-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> FF75
Vcy-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> ZF14
Vcy-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> ZF170
Vcy-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> ZF205
Vcy-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> ZF207
Vcy-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> ZF255
Vcy-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> ZF264
Vcy-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> ZF270
Vcy-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> ZF28
Vcy-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> ZF30
Vcy-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> ZF65
Vcy-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio cyclitrophicus</i> ZF99
Vdi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio diabolicus</i>
Vdi-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio diazotrophicus</i> NBRC 103148
Ve-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio ezurae</i> NBRC 102218
Vfl-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio fluvialis</i>
Vfl-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio fluvialis</i> 539
Vfl-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio fluvialis</i> 560
Vfl-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio fluvialis</i> I21563
Vfl-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio fluvialis</i> PG41
Vfo-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio fortis</i>
Vfu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio furnissii</i> CIP 102972
Vfu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio furnissii</i> NCTC 11218
Vfu-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio furnissii</i> ZOR0035
Vga-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio galathea</i>
Vge-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio genomosp.</i> F10 str. 9ZB36
Vge-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio genomosp.</i> F10 str. 9ZC157
Vge-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio genomosp.</i> F10 str. 9ZD137
Vge-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio genomosp.</i> F10 str. ZF-129
Vge-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio genomosp.</i> F6 str. FF-238
Vha-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio haliotocoli</i> NBRC 102217
Vha-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio harveyi</i>

Vha-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio harveyi</i> 1DA3
Vha-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio harveyi</i> AOD131
Vha-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio harveyi</i> ATCC BAA-1116
Vha-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio harveyi</i> CAIM 1792
Vha-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio harveyi</i> E385
Vha-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio harveyi</i> HY01
Vha-9-1 to Vha-9-2	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio harveyi</i> NBRC 15634 = ATCC 14126
Vha-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio harveyi</i> VHJR4
Vha-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio harveyi</i> VHJR7
Vha-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio harveyi</i> ZJ0603
Vhy-1-1 to Vhy-1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio hyugaensis</i>
Vic-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio ichthyenteri</i> ATCC 700023
Vja-1-1 to Vja-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio jasicida</i>
Vja-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio jasicida</i> 090810c
Vja-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio jasicida</i> CAIM 1864 = LMG 25398
Vja-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio jasicida</i> MWB 21
Vka-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio kanaloe</i> 5S-149
Vle-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio lentus</i>
Vli-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio litoralis</i> DSM 17657
Vma-1-1 to Vma-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio maritimus</i>
Vme-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio metschnikovii</i> CIP 69.14
Vme-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio mexicanus</i>
Vmi-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio mimicus</i> CAIM 1883
Vmi-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio mimicus</i> CAIM 602
Vmi-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio mimicus</i> MB-451
Vmi-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio mimicus</i> SX-4
Vmi-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio mimicus</i> VM223
Vmi-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio mimicus</i> VM573
Vmi-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio mimicus</i> VM603
Vmy-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio mytili</i>
Vna-1-1 to Vna-1-2	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio natriegens</i> NBRC 15636 = ATCC 14048 = DSM 759
Vna-2-1 to Vna-2-4	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio navarrensis</i>
Vne-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio neptunius</i>
Vne-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nereis</i>
Vni-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i>
Vni-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> AM115
Vni-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> ATCC 27043
Vni-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> BLFn1
Vni-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> ENn2
Vni-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> FTn2
Vni-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> MADA3029
Vni-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> Pon4
Vni-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> SFn118
Vni-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> SFn135
Vni-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> SFn27
Vni-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> SO65
Vni-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> SOn1
Vni-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio nigripulchritudo</i> Wn13
Vor-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio ordalii</i> 12B09
Vor-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio ordalii</i> ATCC 33509
Vor-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio ordalii</i> FF-167
Vor-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio ordalii</i> FF-93
Vor-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio ordalii</i> FS-144
Vor-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio ordalii</i> FS-238
Vhe-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio oreintalis</i> group <i>Vibrio hepatarius</i>
Vsi-1-1 to Vsi-1-4	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio oreintalis</i> group <i>Vibrio sinaloensis</i>
Vtu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio oreintalis</i> group <i>Vibrio tubiashii</i>
Vtu-2-1 to Vtu-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio oreintalis</i> group <i>Vibrio tubiashii</i> ATCC 19109
Vor-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio orientalis</i> CIP 102891
Vor-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio orientalis</i> CIP 102891 = ATCC 33934
Vow-2-1 to Vow-2-4	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio owensii</i>
Vow-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio owensii</i> 47666-1
Vow-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio owensii</i> ATCC 25919
Vow-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio owensii</i> CAIM 1854 = LMG 25443
Vow-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio owensii</i> CAIM 1854 = LMG 25443

Vsp-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	AND4
Vsp-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	B183
Vsp-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	ECSMB14105
Vsp-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	ECSMB14106
Vsp-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	EJY3
Vsp-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	ER1A
Vsp-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	Ex25
Vsp-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	HENC-01
Vsp-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	HENC-03
Vsp-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	J2-1
Vsp-12-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	J2-12
Vsp-13-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	J2-15
Vsp-14-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	J2-17
Vsp-15-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	J2-26
Vsp-16-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	J2-29
Vsp-17-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	J2-3
Vsp-18-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	J2-31
Vsp-19-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	J2-4
Vsp-20-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	J2-6
Vsp-21-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	J2-8
Vsp-22-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	MED222
Vsp-23-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	N418
Vsp-24-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	OY15
Vsp-25-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	RC341
Vsp-26-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	RC586
Vsp-27-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	S234-5
Vsp-28-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	S457-15
Vsp-29-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	S512-13
Vsp-31-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	Vb278
Vsp-30-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	VPAP30
Vsp-32-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio sp.</i>	ZOR0018
Vsp-33-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	0407ZC148
Vsp-34-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	12B01
Vsp-35-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	12E03
Vsp-36-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	12F01
Vsp-37-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	1F-157
Vsp-38-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	1S-124
Vsp-39-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	5S-101
Vsp-40-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	ATCC 33789
Vsp-41-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	FF-500
Vsp-42-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	FF-6
Vsp-43-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	LGP32
Vsp-44-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	ZF-90
Vsp-45-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio splendidus</i>	ZS-139
Vta-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio tasmaniensis</i>	1F-155
Vta-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio tasmaniensis</i>	1F-187
Vta-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio tasmaniensis</i>	1F-267
Vtu-2-1 to Vtu-2-2	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio tubiashii</i>	ATCC 19109
Vtu-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio tubiashii</i>	NCIMB 1337 = ATCC 19106
Vva-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio variabilis</i>	
Vvu-1-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio vulnificus</i>	
Vvu-2-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio vulnificus</i>	B2
Vvu-3-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio vulnificus</i>	BAA87
Vvu-5-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio vulnificus</i>	CladeA-yb158
Vvu-4-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio vulnificus</i>	CMCP6
Vvu-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio vulnificus</i>	E64MW
Vvu-7-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio vulnificus</i>	JY1305
Vvu-8-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio vulnificus</i>	MO6-24/O
Vvu-9-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio vulnificus</i>	NBRC 15645 = ATCC 27562
Vvu-10-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio vulnificus</i>	VVyb1(BT3)
Vvu-11-1	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	<i>Vibrio vulnificus</i>	YJ016
Sen-1026-1	CDC07-0191	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Salmonella
						Salmonella	enterica subsp. entericaserovar

Tennessee *Salmonella enterica subsp. enterica serovar* Tennessee str

Sen-1027-1 to Sen-1027-2	CVM19633Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Schwarzengrund str
Sen-1028-1	CVM23701Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> 4,[5],12:i:- <i>Salmonella enterica subsp. enterica serovar</i> 4,[5],12:i:- str
Sen-1029-1	GA_MM04042433Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Javiana str
Sen-1030-1	HLN05-537Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Weltevreden <i>Salmonella enterica subsp. enterica serovar</i> Weltevreden str
Sen-1031-1	P125109Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Enteritidis <i>Salmonella enterica subsp. enterica serovar</i> Enteritidis str
Sen-1032-1	RKS4594Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Paratyphi C <i>Salmonella enterica subsp. enterica serovar</i> Paratyphi C strain
Sen-1033-1	SC-B67Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Choleraesuis <i>Salmonella enterica subsp. enterica serovar</i> Choleraesuis str
Sen-1027-1 to Sen-1027-2 env-1 to env-1113	SL480Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae <i>Salmonella enterica subsp. enterica serovar</i> Schwarzengrund str environmental samples

12.2 Gene contexts

Each L31-Gammaproteobacteria RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one L31-Gammaproteobacteria RNA are assigned a color; other domains are gray. Infor-

mation about these conserved domains is given in Section 12.3. The accession of the sequence containing each L31-Gammaproteobacteria RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each L31-Gammaproteobacteria RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 12.1.

abbrev.	Seq. accession	5′ at	3′ at	genes
CBa-1-1	NZ_CP008985.1	-	204157	204106 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-1-1	NZ_JSVY01000012.1	-	77506	77438 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-1-2	NZ_JSVG01000014.1	-	77621	77553 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-1-3	NZ_JSVV01000016.1	-	77506	77438 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-1-4	NZ_JSVF01000014.1	-	77502	77434 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-1-5	NZ_JSVZ01000012.1	-	77500	77432 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-1-6	NZ_JSVX01000015.1	-	77504	77436 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-7-1	NZ_ADOL01000025.1	-	39997	39929 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-9-1	NZ_ADXN01000034.1	-	46762	46694 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-12-1	NZ_ADOF01000042.1	-	41201	41133 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-10-1	NZ_ADOE01000024.1	-	29041	28973 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-5-1	NZ_ADOJ01000013.1	-	61583	61515 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-4-1	NZ_AACK01000007.1	+	70556	70624 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-2-1	NC_009053.1	-	1135896	1135828 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-11-1	NC_010278.1	-	1103179	1103111 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apl-6-1	NZ_ADOK01000015.1	-	71511	71443 RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Apl-15-1	NZ_ADOI01000029.1	-	71436	71368	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Apl-4-2	NZ_ADOD01000015.1	-	71510	71442	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_4 (pfam13439) Glyco_trans_1.4 (pfam13692) GT1_WabH_like (cd03811) → Glyco_transf_4 (pfam13439) Glyco_trans_1.4 (pfam13692) GT1_WabH_like (cd03811) → RfaB (COG0438) Glyco_trans_1.4 (pfam13692) → RfaB (COG0438) Glyco_trans_1.4 (pfam13692) → Glyco_transf_25 (pfam01755) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → PBP2_IIvY (cd08430) PRK11716 (PRK11716) HTH_1 (pfam00126) → PBP2_IIvY (cd08430) PRK11716 (PRK11716) HTH_1 (pfam00126) →
Apl-13-1	NZ_ADXO01000023.1	+	90529	90597	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_4 (pfam13439) Glyco_trans_1.4 (pfam13692) GT1_WabH_like (cd03811) → Glyco_transf_4 (pfam13439) Glyco_trans_1.4 (pfam13692) GT1_WabH_like (cd03811) → RfaB (COG0438) Glyco_trans_1.4 (pfam13692) → RfaB (COG0438) Glyco_trans_1.4 (pfam13692) → Glyco_transf_25 (pfam01755) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → PBP2_IIvY (cd08430) PRK11716 (PRK11716) HTH_1 (pfam00126) → PBP2_IIvY (cd08430) PRK11716 (PRK11716) HTH_1 (pfam00126) →
Apl-13-2	NZ_ADOG01000014.1	-	47926	47858	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_4 (pfam13439) Glyco_trans_1.4 (pfam13692) GT1_WabH_like (cd03811) → Glyco_transf_4 (pfam13439) Glyco_trans_1.4 (pfam13692) GT1_WabH_like (cd03811) → RfaB (COG0438) Glyco_trans_1.4 (pfam13692) → RfaB (COG0438) Glyco_trans_1.4 (pfam13692) → Glyco_transf_25 (pfam01755) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → PBP2_IIvY (cd08430) PRK11716 (PRK11716) HTH_1 (pfam00126) → PBP2_IIvY (cd08430) PRK11716 (PRK11716) HTH_1 (pfam00126) →
Apl-8-1	NZ_ADOM01000021.1	-	33413	33345	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Apl-3-1	NZ_ALYN01000041.1	+	3861	3929	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Apl-14-1	NC_010939.1	-	1164688	1164620	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Aur-1-1	NZ_GL831080.1	-	1453322	1453254	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → COG3306 (COG3306) →
Aca-3-1	NZ_KB893948.1	-	16328	16260	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Aeq-1-1	NZ_CP007715.1	+	402750	402818	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → PRK11560 (PRK11560) OpgE (COG2194) → PRK11560 (PRK11560) OpgE (COG2194) → PBP2_IIvY (cd08430) PRK11716 (PRK11716) HTH_1 (pfam00126) →
Asu-3-1	NC_018690.1	+	390402	390470	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Asu-2-1	NZ_CP009159.1	+	393106	393174	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mgr-1-1	NZ_KK211212.1	+	396749	396813	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → NT_Rel-Spo_like (cd05399) RelA_SpoT (smart00954) Glyco_trans_1.4 (pfam13692) GT1_WabH_like (cd03811) → RfaB (COG0438) Glyco_trans_1.4 (pfam13692) → COG3306 (COG3306) → Glyco_transf_25 (pfam01755) → hypo → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → PBP2_IIvY (cd08430) PRK11716 (PRK11716) HTH_1 (pfam00126) →
Mha-1-1	NZ_JANJ01000001.1	-	79621	79557	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo → hypo → Glyco_trans_1.4 (pfam13692) GT1_WabH_like (cd03811) → RfaB (COG0438) Glyco_trans_1.4 (pfam13692) → Glyco_transf_25 (pfam01755) → hypo → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → PBP2_IIvY (cd08430) PRK11716 (PRK11716) HTH_1 (pfam00126) →
Ami-1-1	NZ_ACFT01000084.1	-	10282	10218	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1	SRS015985_C1526570	+	287	362	RNA → rpmE (PRK00528) rpmE (PRK00019) rpmE2 (PRK01678) Ribosomal_L31 (pfam01197) →
env-2	SRS023930_C2176577	+	466	541	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-3	SRS018157_C4602690	-	233	158	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-4	SRS047634_C4407474	-	233	158	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-5	SRS054569_C1471628	-	107	32	RNA → ←hypo
env-6	SRS054776_C1595061	+	330	405	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-7	SRS057692_C2665711	-	233	158	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Hpa-7-1	NZ_AJMU01000049.1	+	103223	103298	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → GT8_A4GalT_like (cd04194) PRK15171 (PRK15171) → GT8_A4GalT_like (cd04194) PRK15171 (PRK15171) →

env-8	SRS016746_Baylor_scaffold_40224	+	146	221	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-9	SRS054569_LANL_scaffold_25218	-	94	31	RNA→	
env-10	SRS063288_LANL_scaffold_2530	+	1047	1110	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hsp-3-1	NZ_AFNK01000053.1	+	171491	171554	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hsp-4-1	NZ_ALJP01000009.1	-	558292	558229	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ami-2-1	NZ_ACQL01000101.1	+	2353	2417	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
					hypo→	hypo→ heptsyl_trn_III (TIGR02201)RfaF (COG0859)→ heptsyl_trn_III (TIGR02201)RfaF (COG0859)
						PBP2_IIvY (cd08430)PRK11716 (PRK11716)HTH_1 (pfam00126)→
						PBP2_IIvY (cd08430)PRK11716 (PRK11716)HTH_1 (pfam00126)→
Lgr-1-1	NZ_AUUA01000002.1	-	220470	220418	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Lgr-1-2	NZ_JMPN01000025.1	+	293044	293096	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Asu-1-1	NC_009655.1	-	577302	577244	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
						RfaB (COG0438)Glyco_transf.4 (pfam13439)Glyco_trans.1.4 (pfam13692)→
env-11	CXWF01061925.1	-	3308	3247	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-12	SS_2KS_010_SOIL_10275784	-	131	83	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-13	SS_3KL_010_SOIL_10001691	-	7887	7839	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-14	JGI24723J26617_10758127	-	170	102	RNA→	←hypo
env-15	CESC01038687.1	-	729	663	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-16	CEQH01042505.1	-	385	318	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-17	CETW01364038.1	+	629	696	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-18	CETX01048977.1	-	408	341	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-19	CERF01019127.1	-	162	95	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-20	CEQG01074012.1	-	409	342	RNA→	←hypo
env-21	CETV01128562.1	+	13281	13348	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-22	CEUN01426188.1	+	2011	2078	RNA→	
Msu-1-1	NZ_LFBU01000002.1	+	848270	848337	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-23	CEPO01041841.1	+	302	369	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-24	JCVI_SCAF_1096626511506	+	1121	1188	RNA→	←hypo
env-25	CEQG01020404.1	-	227	160	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-26	CEQI01049741.1	-	226	159	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-27	CESF01207655.1	-	224	157	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-28	CESL01139457.1	-	5587	5520	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-29	CESZ01134189.1	-	245	178	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-30	CETE01075107.1	-	140	73	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-31	CETO01087919.1	-	2899	2832	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-32	CEUD01163365.1	-	87	20	RNA→	
env-33	CEUK01041327.1	+	883	950	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-34	CEUN01036455.1	+	243	310	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-35	CEUO01155056.1	-	244	177	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-36	CEUP01002300.1	-	807	740	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-37	CEUY01458679.1	+	707	774	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-38	CEVA01074234.1	+	2215	2282	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-39	CEVF01240641.1	+	177	244	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Maq-1-1	NC_008740.1	+	934053	934120	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Mhy-1-1	NC_017067.1	+	725999	726066	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-40	CEOQ01442252.1	+	97	164	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-41	CESC01020679.1	+	177	244	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-42	CESG01154223.1	+	103	170	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-43	CETV01059046.1	+	2077	2144	RNA→	
env-44	CETX01171622.1	-	76	9	RNA→	
Msp-3-1	NZ_AXCB01000001.1	+	105151	105218	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Msp-2-1	NZ_AXCC01000018.1	+	77998	78065	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Msp-1-1	NZ_AXBW01000028.1	+	103644	103711	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

Vli-1-1	NZ_AUFZ01000019.1	+	108185	108264	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Mma-1-1	NZ_KB907177.1	+	14551	14600	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-45	SRS012285_C2873870	-	78	16	RNA → ←-hypo
Ase-1-1	NZ_JUNA01000018.1	+	111392	111454	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK11204 (PRK11204)Glycos_transf_2 (pfam00535) → Glyco_transf_25 (pfam01755) → PRK10422 (PRK10422)RfaF (COG0859)heptsyl_trn_I (TIGR02193) →
env-46	SRS018665_C3795409	+	2089	2151	RNA →
env-47	SRS013252_Baylor_scaffold_62500	-	785	723	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-48	SRS024561_LANL_scaffold_41247	+	465	527	RNA →
env-49	SRS054653_C2095882	+	4516	4578	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-50	SRS019980_C2847671	+	273	335	RNA →
Asp-10-1	NZ_KE952614.1	+	72182	72244	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-51	SRS020340_C2956907	+	757	819	RNA →
env-52	SRS012285_Baylor_scaffold_9025	-	2205	2143	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-53	SRS022083_Baylor_scaffold_5040	-	9430	9368	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-54	SRS024021_C2036330	+	1818	1880	RNA →
env-55	SRS063999_LANL_scaffold_32076	+	1170	1232	RNA →
env-56	SRS015470_WUGC_scaffold_58201	-	80	18	RNA → ←-hypo
env-57	SRS022625_C2179389	+	516	578	RNA →
env-58	SRS016360_Baylor_scaffold_18492	+	21485	21547	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-59	SRS015989_C2159326	-	78	16	RNA → ←-hypo
env-60	SRS018573_WUGC_scaffold_22344	+	439	501	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761)PgaC_IcaA (TIGR03937) → Glyco_transf_25 (cd06532) → heptsyl_trn_III (TIGR02201)RfaF (COG0859) → RfaF (COG0859)heptsyl_trn_I (TIGR02193) →
env-61	SRS017025_Baylor_scaffold_27584	+	2458	2520	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) →
env-62	SRS024381_LANL_scaffold_67893	+	1708	1770	RNA →
env-63	SRS014894_WUGC_scaffold_36672	-	4155	4093	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → RfaF (COG0859) → RfaF (COG0859)heptsyl_trn_I (TIGR02193) →
env-64	SRS015215_C2600664	-	78	16	RNA → ←-hypo
env-65	SRS015899_WUGC_scaffold_3106	+	46064	46126	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → RfaF (COG0859) → RfaF (COG0859)heptsyl_trn_I (TIGR02193) →
env-66	SRS017227_Baylor_scaffold_61342	+	554	616	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → RfaF (COG0859) → RfaF (COG0859)heptsyl_trn_I (TIGR02193) →
env-67	SRS017304_Baylor_scaffold_19757	-	78	16	RNA → ←-hypo
env-68	SRS019387_WUGC_scaffold_24141	+	6275	6337	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → RfaF (COG0859) → RfaF (COG0859)heptsyl_trn_I (TIGR02193) →
env-69	SRS047113_LANL_scaffold_23525	-	321	259	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-70	SRS051930_LANL_scaffold_27228	-	252	190	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aap-1-1	NZ_CP012067.1	-	796610	796548	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → RfaF (COG0859) → RfaF (COG0859)heptsyl_trn_I (TIGR02193) →
env-71	SRS016541_C1538931	+	423	485	RNA →
env-72	SRS022602_Baylor_scaffold_61937	-	1250	1188	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → RfaF (COG0859) →
Aap-2-1	NZ_AEWB02000018.1	-	85143	85081	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201)RfaF (COG0859) → hypo → RfaF (COG0859)heptsyl_trn_I (TIGR02193) → hypo →
Aap-4-1	NC_012913.1	-	2198554	2198492	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201)RfaF (COG0859) → RfaF (COG0859)heptsyl_trn_I (TIGR02193) →
Aap-3-1	NZ_JH370360.1	+	401206	401268	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201)RfaF (COG0859) → RfaF (COG0859)heptsyl_trn_I (TIGR02193) →
env-73	SRS043772_C1670834	+	6	68	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aac-6-1	NZ_AHGR01000004.1	-	184068	184006	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → RfaF (COG0859)heptsyl_trn_II (TIGR02195) → RfaF (COG0859)heptsyl_trn_I (TIGR02193) →
Aac-6-2	NZ_JPZI01000004.1	-	184068	184006	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → RfaF (COG0859)heptsyl_trn_I (TIGR02193) →
Aac-18-1	NZ_AEJM01000001.1	-	87551	87489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → heptsyl_trn_III (TIGR02201)RfaF (COG0859) → RfaF (COG0859)heptsyl_trn_I (TIGR02193) →

env-74	SRS015440_WUGC_scaffold.6417	-	4077	4015	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
env-75	SRS015470_WUGC_scaffold.59811	+	5208	5270	RNA → ←-hypo
Aac-11-1	NZ_AJMH02000011.1	-	24012	23950	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-13-1	NZ_AJMF02000017.1	+	70410	70472	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → RfaF (COG0859) heptsyl_trn_II (TIGR02195) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-10-1	NZ_AEJQ02000005.1	+	70473	70535	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → RfaF (COG0859) heptsyl_trn_II (TIGR02195) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-5-1	NZ_CP008984.1	-	898809	898747	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → RfaF (COG0859) heptsyl_trn_II (TIGR02195) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-12-1	NZ_AEJP02000020.1	+	70468	70530	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → RfaF (COG0859) heptsyl_trn_II (TIGR02195) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-5-2	NZ_CP007502.1	-	898825	898763	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → RfaF (COG0859) heptsyl_trn_II (TIGR02195) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
env-76	SRS014578_WUGC_scaffold.38482	-	78	16	RNA → ←-hypo
Aac-17-1	NZ_AEJL02000024.1	+	13375	13437	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-8-1	NZ_AJME02000090.1	+	106908	106970	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-19-1	NZ_AEJN02000055.1	-	25976	25914	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-20-1	NZ_AEJO02000018.1	-	44504	44442	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-2-1	NZ_ADOA02000047.1	-	30641	30579	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-7-1	NZ_KB290891.1	-	30592	30530	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-3-1	NC_017846.1	+	1029004	1029066	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-9-1	NZ_AEJK02000020.1	+	101509	101571	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-1-1	NC_016513.1	+	697940	698002	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → RfaF (COG0859) heptsyl_trn_II (TIGR02195) → RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-14-1	NZ_AJMG02000014.1	-	113578	113516	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-15-1	NZ_ADOB02000039.1	-	112687	112625	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-16-1	NZ_AEJR02000001.1	-	113506	113444	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
Aac-4-1	NZ_AQUU01000002.1	-	112901	112839	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
env-77	SRS023841_C1659419	-	2614	2552	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
env-78	SRS015755_WUGC_scaffold.22028	+	65	127	RNA → MdoB (COG1368) →
env-79	SRS018337_C2327845	-	78	16	RNA → ←-hypo
env-80	SRS021960_Baylor_scaffold.32245	+	12294	12356	RNA →
env-81	SRS023358_LANL_scaffold.27865	+	1270	1332	RNA →
env-82	SRS023964_Baylor_scaffold.14591	-	354	292	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-83	SRS024649_C3591928	-	72	10	RNA → ←-hypo
env-84	SRS043018_C3857017	+	957	1019	RNA → ←-hypo
env-85	SRS051378_C1863951	+	1282	1344	RNA →
env-86	SRS013170_Baylor_scaffold.88653	-	228	166	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-87	SRS015044_WUGC_scaffold.71804	+	4985	5047	RNA →
env-88	SRS017227_Baylor_scaffold.62075	-	78	16	RNA → ←-hypo

env-89	SRS042984_LANL_scaffold.10671	+	2469	2531	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) PgaC_IcaA (TIGR03937) → Glyco_transf_25 (cd06532) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → RfaF (COG0859) heptsyl_trn_I (TIGR02193) →
env-90	SRS016575_Baylor_scaffold.17318	-	78	16	RNA → ← hypō
env-91	SRS019028_WUGC_scaffold.5331	+	1625	1687	RNA → Glyco_trans_1.4 (pfam13692) GT1_WabH_like (cd03811) → RfaB (COG0438) Glyco_trans_1.4 (pfam136) Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → Glyco_tranf_GTA_type (cd00761) PRK10073 (PRK10073) →
env-92	SRS022621_C4052712	-	78	16	RNA → ← hypō
Ase-2-1	NZ_GL622200.1	-	217473	217411	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-93	SRS019980_Baylor_scaffold.31063	-	78	16	RNA → ← hypō
env-94	SRS063999_C3424258	-	78	16	RNA → ← hypō
env-95	SRS049318_LANL_scaffold.14633	+	1589	1651	RNA →
Pda-1-1	NZ_GG704815.1	-	133177	133128	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-14-1	NZ_CP004391.1	+	1445051	1445101	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → GT8_A4GalT_like (cd04194) PRK15171 (PRK15171) →
Pmu-2-1	NZ_AROA01000259.1	+	533	586	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō →
Pmu-20-1	NZ_AWTD01000005.1	+	291403	291456	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-13-1	NZ_JQAF01000008.1	+	291632	291685	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-13-2	NZ_JQAC01000008.1	+	291094	291147	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-13-3	NZ_JQAB01000008.1	+	291094	291147	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-13-4	NZ_JQAE01000008.1	+	292160	292213	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-13-5	NZ_JQAH01000009.1	+	223095	223148	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-13-6	NZ_JPHI01000008.1	+	291065	291118	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-13-7	NZ_JQAG01000008.1	+	291632	291685	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-13-8	NZ_JQEB01000010.1	+	291109	291162	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-13-9	NZ_JQEA01000012.1	+	290579	290632	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-13-10	NZ_JQAD01000008.1	+	291094	291147	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-13-11	NZ_JQAO01000009.1	+	223226	223279	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-13-12	NZ_JQAI01000008.1	+	291094	291147	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_tranf_GTA_type (cd00761) Glyco_tranf_2.3 (pfam13641) → hypō → RfaF (COG0859) heptsyl_trn_I (TIGR02193) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-16-1	NZ_ALYC02000068.1	-	827	774	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypō → hypō →

Pmu-8-1	NZ_CP004392.1	-	1820422	1820372	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → Glyco_transf_25 (pfam01755) → CgtA (pfam06306) → CgtA (pfam06306) → Glyco_transf_4 (pfam13439) Glyco_trans_1.4 (pfam13692) GT1_WabH_like (cd03811) →
Pmu-12-1	NZ_CM001580.1	+	1329398	1329448	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pmu-3-1	NZ_AQTL01000106.1	-	3016	2966	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-10-1	NZ_ARNZ01000104.1	+	1190	1240	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-4-1	NZ_ARNW01000018.1	+	4332	4382	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-7-1	NZ_ARNX01000001.1	-	43763	43713	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-21-1	NC_002663.1	+	1342547	1342597	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-11-1	NZ_CM001581.1	+	1417199	1417249	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-5-1	NC_016808.1	-	12183	12133	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-18-1	NZ_CP003328.1	-	12083	12033	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-15-1	NZ_CM002276.1	+	23245	23295	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-1-1	NZ_CP008918.1	-	823037	822987	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-9-1	NZ_ARNY01000003.1	-	60597	60547	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-6-1	NZ_ARWR01000002.1	+	265889	265939	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-19-1	NC_017027.1	-	15811	15761	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Pmu-17-1	NC_017764.1	-	15831	15781	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Mma-3-1	NZ_CDQL01000004.1	-	255958	255897	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pbe-2-1	NZ_AJSX01000004.1	+	13647	13708	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Msu-2-1	NC_006300.1	-	416530	416470	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → GT8_A4GalT_like (cd04194) PRK15171 (PRK15171) Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → hypo →
env-96	SRS023958_Baylor_scaffold_5426	-	392	342	RNA → hypo →
env-97	SRS011271_C3031949	+	247	297	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-98	SRS018969_WUGC_scaffold_19392	-	1477	1427	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-99	SRS023526_C3187054	-	873	823	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-100	SRS024277_LANL_scaffold_49966	+	339	389	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Hpa-2-1	NZ_JVSL01000025.1	+	13438	13488	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Hpa-2-2	NZ_JVHG01000004.1	-	10892	10842	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-101	SRS016225_WUGC_scaffold_2971	+	183	233	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-102	SRS019071_WUGC_scaffold_37000	-	305	255	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-103	SRS024087_C3536836	+	1002	1052	RNA →
env-104	SRS063932_LANL_scaffold_93582	-	66	16	RNA →
env-105	SRS024021_Baylor_scaffold_3567	+	655	705	RNA →
env-106	SRS014473_WUGC_scaffold_5102	+	2802	2852	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-107	SRS015060_WUGC_scaffold_6035	-	267	217	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-108	SRS023534_C140704	+	184	234	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-109	scaffold9440_1_MH0072	+	805	855	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-110	SRS014468_C479594	+	50	100	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-111	SRS012902_C495709	+	47	97	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-112	SRS014107_C1310462	+	78	128	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-113	SRS014470_C3580284	+	17	67	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

env-114	SRS014684_C3226119	-	425	375	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-115	SRS015154_WUGC_scaffold.4241	+	17	67	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-116	SRS015650_WUGC_scaffold.11302	+	60	110	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-117	SRS016200_WUGC_scaffold.15359	+	2090	2140	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-118	SRS016342_Baylor_scaffold.20824	+	57	107	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-119	SRS016503_LANL_scaffold.2981	+	71	121	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-120	SRS016533_C471857	+	71	121	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-121	SRS016575_Baylor_scaffold.14305	+	208	258	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-122	SRS017445_Baylor_scaffold.14093	+	48	98	RNA→	←TonB-siderophor (TIGR01783)TonB_dep_Rec (pfam00593)
env-123	SRS018665_WUGC_scaffold.24884	+	71	121	RNA→	←PRK13524 (PRK13524)ligand_gated_channel (cd01347)
env-124	SRS018791_WUGC_scaffold.50431	+	17	67	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-125	SRS022621_Baylor_scaffold.64879	+	117	167	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-126	SRS022625_Baylor_scaffold.7805	-	66	16	RNA→	
env-127	SRS022721_C501186	-	318	268	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-128	SRS023617_Baylor_scaffold.71993	+	48	98	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-129	SRS023835_Baylor_scaffold.11069	-	295	245	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-130	SRS023926_Baylor_scaffold.35367	+	75	125	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-131	SRS024318_LANL_scaffold.16452	+	48	98	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-132	SRS024381_LANL_scaffold.28820	+	71	121	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-133	SRS024557_C267439	+	71	121	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-134	SRS042131_WUGC_scaffold.18379	+	1363	1413	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-135	SRS048719_WUGC_scaffold.10207	+	648	698	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-136	SRS052874_LANL_scaffold.13398	+	539	589	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-137	SRS054956_LANL_scaffold.30996	+	2601	2651	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-138	SRS064449_LANL_scaffold.6703	+	601	651	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hpa-2-3	NZ_JVPX01000007.1	-	10911	10861	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-139	3300001196.1009759	+	160	210	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-140	scaffold25950.1_MH0073	+	515	565	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-141	SRS011086_WUGC_scaffold.33563	-	474	424	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-142	SRS014692_WUGC_scaffold.12598	+	345	395	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-143	SRS017088_C1144155	-	81	31	RNA→	
env-144	SRS018774_WUGC_scaffold.1636	-	68	18	RNA→	
env-145	SRS021986_C925803	-	129	79	RNA→	rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-146	SRS043239_C1968841	+	117	167	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-147	SRS044366_C951592	+	2864	2914	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-148	SRS053630_LANL_scaffold.5204	+	273260	273310	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-149	SRS053917_C3768051	+	554	604	RNA→	
env-150	SRS064329_LANL_scaffold.3760	+	358	408	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-151	SRS075404_C3577072	-	300	250	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-152	Saliva_LANL.C141248	+	159	209	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-153	Throat_LANL.C5774541	+	179	229	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-154	UnmappedStool_Broad.C252872408	+	329	279	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-155	SRS011247_Baylor_scaffold.2642	-	68	18	RNA→	
env-156	SRS011529_C4573705	+	205	255	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-157	SRS012279_Baylor_scaffold.42064	-	295	245	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-158	SRS013234_Baylor_scaffold.25561	-	434	384	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-159	SRS013502_Baylor_scaffold.15687	-	357	307	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-160	SRS013705_Baylor_scaffold.9676	-	304	254	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-161	SRS013711_C1736629	-	324	274	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-162	SRS013723_Baylor_scaffold.21329	-	159	109	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-163	SRS013818_Baylor_scaffold.39426	-	207	157	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-164	SRS013825_Baylor_scaffold.3706	+	131	181	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-165	SRS013836_C4728831	+	152	202	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-166	SRS013881_WUGC_scaffold.7653	-	253	203	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-167	SRS013945_WUGC_scaffold.15499	-	346	296	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-168	SRS013947_WUGC_scaffold.18108	-	207	157	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-169	SRS013948_WUGC_scaffold.4756	+	610	660	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-170	SRS013950_C2184733	+	2868	2918	RNA→	rpmE (PRK00528)rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-171	SRS014126_C559458	+	145	195	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-172	SRS014271_WUGC_scaffold.41463	+	179	229	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-173	SRS014575_C476087	+	226	276	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-174	SRS014686_C892496	+	364	414	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-175	SRS014890_C397523	-	260	210	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-176	SRS015057_C3383085	+	266	316	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-177	SRS015209_WUGC_scaffold.13430	-	873	823	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-178	SRS015272_C3511097	-	79	29	RNA→	
env-179	SRS015395_C2368773	-	127	77	RNA→	rpmE (PRK00528)rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-180	SRS015434_WUGC_scaffold.16743	-	64	14	RNA→	
env-181	SRS015578_WUGC_scaffold.34785	-	689	639	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-182	SRS015745_WUGC_scaffold.1107	-	148	98	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-183	SRS015797_WUGC_scaffold.3481	+	265	315	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-184	SRS015893_C2295370	-	293	243	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-185	SRS015895_WUGC_scaffold.997	-	4030	3980	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-186	SRS015899_WUGC_scaffold.31920	+	1115	1165	RNA→	
env-187	SRS015921_WUGC_scaffold.8625	-	2466	2416	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-188	SRS015941_WUGC_scaffold.8499	+	674	724	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-189	SRS015989_WUGC_scaffold.6985	-	66	16	RNA→	
env-190	SRS016319_WUGC_scaffold.52031	+	117	167	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-191	SRS016501_LANL_scaffold.19928	+	109	159	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-192	SRS016600_Baylor_scaffold.790	-	153	103	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-193	SRS017080_C1218701	-	375	325	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-194	SRS017120_Baylor_scaffold.43405	-	677	627	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-195	SRS017209_C2427531	+	266	316	RNA→	
env-196	SRS017713_Baylor_scaffold.3587	-	374	324	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-197	SRS018145_Baylor_scaffold.10947	-	73	23	RNA→	
env-198	SRS018300_Baylor_scaffold.30	+	260	310	RNA→	
env-199	SRS018359_Baylor_scaffold.4860	-	257	207	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-200	SRS018439_Baylor_scaffold.16838	+	239	289	RNA→	
env-201	SRS018573_C2361858	-	65	15	RNA→	
env-202	SRS018591_WUGC_scaffold.44156	-	226	176	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-203	SRS018661_WUGC_scaffold.2690	-	953	903	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-204	SRS018739_C3611004	-	374	324	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-205	SRS018971_WUGC_scaffold.6404	+	266	316	RNA→	←PRK13524 (PRK13524)ligand_gated_channel (cd01347)
env-206	SRS018975_WUGC_scaffold.41000	-	368	318	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-207	SRS019022_WUGC_scaffold.65126	+	326	376	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-208	SRS019026_C1969885	+	607	657	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-209	SRS019027_WUGC_scaffold.18155	-	713	663	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-210	SRS019045_WUGC_scaffold.19548	+	272	322	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-211	SRS019120_C1279990	+	248	298	RNA→	
env-212	SRS019122_WUGC_scaffold.7081	-	561	511	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-213	SRS019124_WUGC_scaffold.7080	-	180	130	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-214	SRS019126_WUGC_scaffold.8147	+	629	679	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-215	SRS019127_C1598465	-	374	324	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-216	SRS019129_C1955039	-	253	203	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-217	SRS019219_C2807201	+	89	139	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-218	SRS019327_C2615848	+	281	331	RNA→	
env-219	SRS019389_C2178886	-	330	280	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-220	SRS019391_WUGC_scaffold.1544	-	264	214	RNA→	
env-221	SRS019397_C1439804	-	920	870	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-222	SRS019607_WUGC_scaffold.1072	+	1281	1331	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-223	SRS019872_C622759	+	365	415	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-224	SRS019894_WUGC_scaffold.40693	-	460	410	RNA→	←PRK13524 (PRK13524)TonB_dep_Rec (pfam00593)
env-225	SRS020334_Baylor_scaffold.37850	-	778	728	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-226	SRS021477_Baylor_scaffold.70117	+	470	520	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-227	SRS021496_Baylor_scaffold.549	-	394	344	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-228	SRS021948_C2754471	-	240	190	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-229	SRS021954_Baylor_scaffold.5062	-	148	98	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-230	SRS022077_C2432114	+	107	157	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-231	SRS022079_Baylor_scaffold.515	-	15255	15205	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-232	SRS022083_Baylor_scaffold.4111	+	1531	1581	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-233	SRS022143_WUGC_scaffold.83552	-	318	268	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-234	SRS022532_LANL_scaffold.10532	+	671	721	RNA→	←hypo
env-235	SRS023837_C582069	+	172	222	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-236	SRS023964_Baylor_scaffold.37730	-	207	157	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-237	SRS024081_LANL_scaffold.839	+	386	436	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-238	SRS024375_LANL_scaffold.34090	-	295	245	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-239	SRS024470_LANL_scaffold.1444	+	270	320	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-240	SRS043676_WUGC_scaffold.7680	-	68	18	RNA→	
env-241	SRS043701_C1745554	-	295	245	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-242	SRS044373_C2721994	-	67	17	RNA→	
env-243	SRS044486_WUGC_scaffold.2702	+	290	340	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-244	SRS045127_LANL_scaffold.25629	-	213	163	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-245	SRS045645_C1878673	+	83	133	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-246	SRS045715_C4716689	-	253	203	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-247	SRS045978_C962638	-	76	26	RNA→	
env-248	SRS047210_WUGC_scaffold.43713	-	305	255	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-249	SRS047219_WUGC_scaffold.2120	+	278	328	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-250	SRS047824_WUGC_scaffold.42445	+	423	473	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-251	SRS048411_C6924320	-	360	310	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-252	SRS048791_LANL_scaffold.60240	-	253	203	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-253	SRS049147_LANL_scaffold.50458	-	171	121	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-254	SRS050029_C660889	+	260	310	RNA→	
env-255	SRS051244_LANL_scaffold.49385	+	361	411	RNA→	
env-256	SRS051791_LANL_scaffold.5910	+	208	258	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-257	SRS052027_C1805428	-	348	298	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-258	SRS052227_LANL_scaffold.41974	-	295	245	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-259	SRS052604_C1681687	+	239	289	RNA→	
env-260	SRS053603_C3252729	+	266	316	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-261	SRS054430_LANL_scaffold.5925	-	66	16	RNA→	
env-262	SRS054590_C647943	-	247	197	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-263	SRS054687_C3379381	-	302	252	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-264	SRS055401_LANL_scaffold.32442	-	252	202	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-265	SRS055426_LANL_scaffold.18857	-	951	901	RNA→	←PRK13528 (PRK13528)TonB_dep_Rec (pfam00593)
env-266	SRS056323_C2564669	-	291	241	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-267	SRS056622_LANL_scaffold.38163	+	117	167	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-268	SRS056892_LANL_scaffold.6433	+	339	389	RNA→	←PRK13528 (PRK13528)ligand_gated_channel (cd01347)

env-269	SRS057539_LANL_scaffold_29320	+	406	456	RNA→←PRK13528 (PRK13528)ligand_gated_channel (cd01347)
env-270	SRS057692_LANL_scaffold_16818	+	97	147	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-271	SRS057791_C3589113	+	145	195	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-272	SRS058336_C2100928	+	217	267	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-273	SRS058723_C6753173	+	271	321	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-274	SRS062540_LANL_scaffold_77508	-	354	304	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-275	SRS062544_C2913519	+	260	310	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-276	SRS063478_C532042	+	109	159	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-277	SRS064423_LANL_scaffold_7733	-	403	353	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-278	SRS064774_C2757027	-	295	245	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-279	SRS065278_LANL_scaffold_48090	-	535	485	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-280	SRS065335_C936123	-	321	271	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-281	SRS075406_C811674	+	97	147	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-282	SRS075410_LANL_scaffold_13122	+	361	411	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-283	SRS077736_LANL_scaffold_33263	-	287	237	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hpa-2-4	NZ_JUOR01000021.1	-	10901	10851	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hpa-6-1	NC_015964.1	-	912647	912597	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-284	4491485.3.NODE_13737	+	3635	3685	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-285	Keratinized_gingiva_LANL_scaffold_2331	+	325	375	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-286	SRS015540_C1078977	+	208	258	RNA→
env-287	SRS016541_Baylor_scaffold_18251	-	14291	14241	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-288	SRS023841_Baylor_scaffold_26182	+	952	1002	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-289	SRS056157_C273441	+	153	203	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-290	NLM007_scaffold6885_2	-	257	207	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-291	NOM018_scaffold11447_1	+	1091	1141	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-292	SRS011098_Baylor_scaffold_8386	-	2267	2217	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-293	SRS011310_Baylor_scaffold_12329	-	240	190	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-294	SRS011343_Baylor_scaffold_2577	+	789	839	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-295	SRS013164_Baylor_scaffold_6398	+	1941	1991	RNA→hypo→
env-296	SRS013533_PGA_scaffold_83577	-	4677	4627	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-297	SRS014477_C1618804	+	520	570	RNA→rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-298	SRS014690_WUGC_scaffold_24846	+	2301	2351	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-299	SRS014894_WUGC_scaffold_15243	+	3458	3508	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-300	SRS015040_WUGC_scaffold_3662	-	66	16	RNA→
env-301	SRS015044_WUGC_scaffold_680	-	16214	16164	RNA→←PRK13524 (PRK13524)ligand_gated_channel (cd01347)
env-302	SRS015063_WUGC_scaffold_20082	-	483	433	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-303	SRS015215_WUGC_scaffold_46212	-	4914	4864	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-304	SRS015374_WUGC_scaffold_2905	+	23086	23136	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-305	SRS015378_WUGC_scaffold_12166	+	554	604	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-306	SRS015440_WUGC_scaffold_25622	+	512	562	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-307	SRS015755_C1590475	+	281	331	RNA→
env-308	SRS016043_WUGC_scaffold_17944	+	1164	1214	RNA→rpmE (PRK00528)rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-309	SRS016092_WUGC_scaffold_1540	-	14964	14914	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-310	SRS016196_C485265	+	1027	1077	RNA→
env-311	SRS016331_C4184433	+	888	938	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-312	SRS016360_Baylor_scaffold_42110	+	1164	1214	RNA→
env-313	SRS017227_Baylor_scaffold_17966	-	2211	2161	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-314	SRS017441_C716525	-	122	72	RNA→rpmE (PRK00528)rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-315	SRS017691_Baylor_scaffold_71029	+	1502	1552	RNA→
env-316	SRS018149_Baylor_scaffold_8518	-	67	17	RNA→
env-317	SRS018337_Baylor_scaffold_3991	-	160	110	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-318	SRS018394_Baylor_scaffold_31222	-	1643	1593	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-319	SRS019029_WUGC_scaffold.48805	-	66	16	RNA→
env-320	SRS019333_WUGC_scaffold.15291	+	2869	2919	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-321	SRS019976_Baylor_scaffold.6230	-	243	193	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-322	SRS019980_Baylor_scaffold.31327	+	562	612	RNA→
env-323	SRS020226_Baylor_scaffold.32347	-	213	163	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-324	SRS020340_Baylor_scaffold.20184	+	496	546	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-325	SRS020858_C769095	-	68	18	RNA→
env-326	SRS020862_Baylor_scaffold.23178	-	1984	1934	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-327	SRS021960_Baylor_scaffold.7710	-	174	124	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-328	SRS022149_LANL_scaffold.6234	-	68	18	RNA→
env-329	SRS023358_C3482659	-	66	16	RNA→
env-330	SRS023538_Baylor_scaffold.23152	-	66	16	RNA→
env-331	SRS023595_Baylor_scaffold.91416	-	66	16	RNA→
env-332	SRS023987_Baylor_scaffold.1631	+	1076	1126	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-333	SRS024017_Baylor_scaffold.15613	-	68	18	RNA→
env-334	SRS024144_LANL_scaffold.20602	+	916	966	RNA→
env-335	SRS024561_C2824542	-	66	16	RNA→
env-336	SRS042457_LANL_scaffold.4939	+	713	763	RNA→
env-337	SRS042984_LANL_scaffold.74580	+	421	471	RNA→
env-338	SRS045313_LANL_scaffold.12892	-	1373	1323	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Glyco_transf_25 (pfam01755)→ PRK10422 (PRK10422)RfaF (COG0859)→
env-339	SRS047634_LANL_scaffold.115926	-	66	16	RNA→
env-340	SRS049268_C4184946	+	288	338	RNA→
env-341	SRS049318_C6295479	-	66	16	RNA→
env-342	SRS050244_C4383723	+	117	167	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-343	SRS050628_LANL_scaffold.4839	-	68	18	RNA→
env-344	SRS052876_LANL_scaffold.39738	+	595	645	RNA→
env-345	SRS053584_LANL_scaffold.42738	+	163	213	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-346	SRS054653_C2080848	-	159	109	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-347	SRS055450_LANL_scaffold.67168	+	1178	1228	RNA→
env-348	SRS058808_LANL_scaffold.12344	+	2015	2065	RNA→
env-349	SRS063287_LANL_scaffold.6852	+	404	454	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-350	SRS064809_LANL_scaffold.5427	+	157	207	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-351	SRS065310_C1245580	-	68	18	RNA→
Hpa-2-5	NZ_JVSU01000025.1	+	2976	3026	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hpa-2-6	NZ_JWCE01000018.1	-	105224	105174	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hpa-2-7	NZ_JVSB01000011.1	+	2976	3026	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hpa-2-8	NZ_JVRH01000079.1	-	114460	114410	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hpa-2-9	NZ_JUTJ01000002.1	-	24649	24599	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hpa-2-10	NZ_JVFE01000001.1	-	48872	48822	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hpa-5-1	NZ_LAJMW01000057.1	-	27592	27542	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hpa-4-1	NZ_AJTC01000031.1	-	50368	50318	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hpa-3-1	NZ_GL872339.1	+	1999941	1999991	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-352	SRS017076_Baylor_scaffold.26623	-	284	234	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-353	SRS015038_C1823634	+	113	163	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-354	SRS024637_C2357778	-	307	257	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-355	SRS053854_LANL_scaffold.40299	+	271	321	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-356	SRS022602_Baylor_scaffold.39274	-	1217	1167	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-357	SRS015470_WUGC_scaffold.7219	+	442	492	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-358	SRS014578_WUGC_scaffold.4249	-	4087	4037	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-359	SRS014474_C733884	+	2001	2051	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-360	SRS020220_Baylor_scaffold.39783	-	240	190	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-361	SRS022145_C596044	+	247	297	RNA→
env-362	SRS042643_WUGC_scaffold.30660	+	182	232	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Hpa-2-11	NZ_JVYT01000034.1	+	2978	3028	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Rpn-1-1	NZ_BBIX01000005.1	-	3001	2951	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Rpn-1-2	NZ_BBIX01000009.1	-	658570	658520	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ppn-1-1	NZ_KB904052.1	+	167149	167199	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-363	SRS014692_C1497409	+	379	429	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-364	SRS014126_C565578	-	84	34	RNA→
env-365	SRS014687_WUGC_scaffold.2169	-	3350	3300	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ PRK11204 (PRK11204)Glycos.transf.2 (pfam00535)→ GT8_A4GalT_like (cd04194)PRK15171 (PRK15171)→ Glyco.transf.25 (pfam01755)→ Glyco.transf.25 (cd06532)→
env-366	SRS018978_C1739365	-	62	12	RNA→
env-367	SRS048719_C812527	+	2851	2901	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-368	SRS016196_C475885	+	466	516	RNA→
env-369	SRS021986_C944337	-	84	34	RNA→
env-370	SRS011090_Baylor_scaffold.4448	-	1061	1011	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Glyco.transf.25 (pfam01755)POX (pfam07526)→
env-371	SRS014472_C402330	-	548	498	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Glyco.transf.25 (pfam01755)→
env-372	SRS016039_WUGC_scaffold.8838	-	2881	2831	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Glyco.transf.25 (pfam01755)POX (pfam07526)→ GT8_A4GalT_like (cd04194)PRK15171 (PRK15171)→ Glyco.transf.25 (pfam01755)→
env-373	SRS017013_Baylor_scaffold.22515	+	291	341	RNA→ Glyco.transf.25 (pfam01755)POX (pfam07526)→
env-374	SRS017810_Baylor_scaffold.7758	+	2802	2852	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Glyco.transf.25 (pfam01755)POX (pfam07526)→
env-375	SRS018329_Baylor_scaffold.7486	+	448	498	RNA→ rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-376	SRS018359_C1229806	+	1424	1474	RNA→
env-377	SRS019329_C786673	-	68	18	RNA→
env-378	SRS019587_C1052142	+	652	702	RNA→
env-379	SRS021473_Baylor_scaffold.4924	+	2802	2852	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Glyco.transf.25 (pfam01755)POX (pfam07526)→
env-380	SRS023534_C139914	-	324	274	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-381	SRS023538_Baylor_scaffold.23260	+	216	266	RNA→ rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-382	SRS024377_LANL_scaffold.33	-	23058	23008	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Glyco.transf.25 (pfam01755)POX (pfam07526)→ GT8_A4GalT_like (cd04194)PRK15171 (PRK15171)→ Glyco.transf.25 (pfam01755)→
env-383	SRS024381_LANL_scaffold.54075	-	559	509	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Glyco.transf.25 (pfam01755)→
env-384	SRS052668_C1028805	+	444	494	RNA→
env-385	SRS015985_WUGC_scaffold.5736	+	8804	8854	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ RfaB (COG0438)Glyco.transf.1.4 (pfam13692)→ GT8_A4GalT_like (cd04194)PRK15171 (PRK15171)→ Glyco.transf.25 (pfam01755)→ Glyco.transf.25 (pfam01755)→ Glyco.transf.GTA_type (cd00761)PRK10073 (PRK10073)→
env-386	SRS011098_Baylor_scaffold.48474	-	745	695	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
env-387	SRS011144_C527765	-	148	98	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-388	SRS016088_C183306	-	94	44	RNA→
env-389	SRS017127_Baylor_scaffold.6911	+	2934	2984	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Glyco.transf.25 (pfam01755)POX (pfam07526)→ GT8_A4GalT_like (cd04194)PRK15171 (PRK15171)→ Glyco.transf.25 (pfam01755)→
env-390	SRS017139_C3563542	+	262	312	RNA→
env-391	SRS017441_C719147	+	344	394	RNA→ rpmE (PRK00528)rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-392	SRS022145_C605259	-	68	18	RNA→
env-393	SRS051116_LANL_scaffold.1628	+	2934	2984	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Glyco.transf.25 (pfam01755)POX (pfam07526)→ GT8_A4GalT_like (cd04194)PRK15171 (PRK15171)→ Glyco.transf.25 (pfam01755)→
env-394	SRS011343_Baylor_scaffold.11773	-	68	18	RNA→
env-395	SRS019387_C1774500	+	1449	1499	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-396	SRS020858_C776329	+	1031	1081	RNA→
env-397	SRS020862_Baylor_scaffold.28830	-	1159	1109	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ Glyco.transf.25 (pfam01755)→
env-398	SRS022532_LANL_scaffold.11832	+	8865	8915	RNA→ Glyco.transf.25 (pfam01755)→
env-399	SRS024281_C986018	+	1138	1188	RNA→
env-400	SRS024289_LANL_scaffold.11530	-	68	18	RNA→
env-401	SRS013164_C2241878	+	310	360	RNA→
env-402	SRS022625_C2147320	+	68	18	RNA→
env-403	SRS023987_C1180207	-	68	18	RNA→

env-404	SRS017080_Baylor_scaffold_3076	-	1935	1885	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Glyco_transf_25 (pfam01755)POX (pfam07526) → GT8_A4GalT_like (cd04194)PRK15171 (PRK15171) →
env-405	SRS024318_LANL_scaffold_15937	-	68	18	RNA →
env-406	SRS050628_LANL_scaffold_21056	+	835	885	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-407	SRS045262_WUGC_scaffold_11350	+	1338	1388	RNA → ← hyp0
env-408	SRS045049_WUGC_scaffold_4937	-	259	209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-409	SRS013239_Baylor_scaffold_8305	+	2802	2852	RNA →
env-410	SRS024017_C890428	-	68	18	RNA →
env-411	SRS013818_Baylor_scaffold_30131	-	190	140	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-412	SRS018300_Baylor_scaffold_30376	-	198	148	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-413	SRS020856_C2499523	+	297	347	RNA →
env-414	SRS024441_LANL_scaffold_23848	+	1393	1443	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-415	SRS043701_C1809232	+	527	577	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-416	SRS049389_C4590327	+	399	449	RNA →
env-417	SRS017215_Baylor_scaffold_5416	+	724	774	RNA →
Hha-1-1	NZ_LCTK01000024.1	+	36220	36270	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-418	SRS011247_C1322309	+	307	357	RNA →
env-419	SRS015574_C3331718	+	437	487	RNA →
Hha-1-2	NZ_LCTI01000049.1	-	6537	6487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-420	SRS019028_C2927759	-	68	18	RNA →
env-421	SRS024087_LANL_scaffold_49246	-	237	187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hha-1-3	NZ_LCTH01000053.1	-	9141	9091	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → CgtA (pfam06306) → Glyco_transf_25 (pfam01755) → Glyco_transf_1_4 (pfam13692)GT1_WabH_like (cd03811) →
Hha-1-4	NZ_LCTJ01000055.1	-	6545	6495	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-422	SRS023930_Baylor_scaffold_6246	+	2806	2856	RNA → ← hyp0
env-423	SRS043422_LANL_scaffold_13569	+	103	153	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-424	SRS017127_C1115545	+	1102	1152	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-425	SRS019125_WUGC_scaffold_9446	+	973	1023	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-426	SRS019221_WUGC_scaffold_2235	-	213	163	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-427	SRS062761_C4146270	+	274	324	RNA →
Hha-4-1	NZ_AFPQ01000010.1	+	312767	312817	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hha-2-1	NZ_AJSV01000029.1	-	6279	6229	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-428	Saliva_LANL_C126650	+	119	169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-429	SRS015803_C2530019	+	300	350	RNA →
Hha-3-1	NZ_AFQO01000007.1	-	7110	7060	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hsp-2-1	NZ_JH591072.1	+	167214	167264	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-430	SRS015436_WUGC_scaffold_10632	-	502	452	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hha-5-1	NZ_AFQQ01000021.1	-	6823	6773	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hha-6-1	NZ_AFQR01000017.1	-	23162	23112	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-17-1	NZ_AAZI01000001.1	+	341323	341373	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-19-1	NC_017451.1	+	1667269	1667319	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-431	SRS014475_C164765	+	539	589	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-5-1	NZ_JXC01000014.1	-	45598	45548	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-7-1	NZ_ABVV01000001.1	-	45931	45881	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-21-1	NZ_ACSM01000001.1	-	45997	45947	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-16-1	NZ_AAZH01000004.1	+	87662	87712	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-20-1	NC_000907.1	-	822480	822430	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-15-1	NC_009566.1	+	1630832	1630882	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-8-1	NC_007146.2	-	887870	887820	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-18-1	NC_017452.1	+	1629437	1629487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-10-1	NC_014920.1	+	1454654	1454704	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hae-1-1	NZ_GL878526.1	-	481719	481669	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-2-1	NC_016809.1	-	927122	927072	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Hin-1-1	NZ_CP007472.1	+	866657	866707	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Hin-9-1	NZ_CP007805.1	+	1761399	1761449	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Hin-1-2	NZ_CP009610.1	+	226803	226853	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Apa-1-1	NZ_LAEO01000011.1	+	134437	134487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Apa-2-1	NZ_AOGF01000002.1	+	91207	91257	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Apa-3-1	NZ_AFFP02000002.1	+	105702	105752	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Apa-4-1	NZ_CBMK010000011.1	-	233267	233217	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Apa-1-2	NZ_LAEN01000032.1	+	12136	12186	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Nro-1-1	NZ_CCMQ01000009.1	-	101998	101948	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Hma-1-1	NZ_CCFL01000036.1	-	64728	64678	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Hsp-1-1	NZ_CCNK01000036.1	-	64728	64678	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-56-1	NZ_CDON01000014.1	-	178969	178919	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-56-2	NZ_CDNG01000014.1	-	178969	178919	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-56-3	NZ_CDEX01000018.1	-	178969	178919	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Hin-17-2	NZ_AAIZ01000001.1	+	243123	243173	RNA → hypo → Glyco_transf_25 (pfam01755) → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
Hin-19-2	NC_017451.1	+	1569026	1569076	RNA → hypo → hypo → hypo → Glyco_transf_25 (pfam01755) → heptsyl_trn_III (TIGR02201) RfaF (COG0859) →
env-432	IMNBL1_c0005061	+	1709	1758	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmu-1-1	NZ_JWIZ01000037.1	-	22959	22904	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → Glyco_transf_25 (cd06532) → Glyco_transf_4 (pfam13439) Glyco_trans_1_4 (pfam13692) GT1_WabH_like (cd03811) → PBP2_IIvY (cd08430) PRK11716 (PRK11716) HTH_1 (pfam00126) → Upp (COG0035) upp (PRK00129) →
Cor-1-1	NZ_JSUM01000010.1	+	3479	3528	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → NTP-PPase_MazG_Nterm (cd11528) NTP-PPase_MazG_Cterm (cd11529) mazG (PRK09562) →
Baq-1-1	NZ_ATYS01000043.1	-	32716	32666	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pfo-1-1	NZ_CP010423.1	-	3853120	3853071	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-433	CEPZ01031768.1	-	3598	3538	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-434	CESI01260480.1	-	92	32	RNA →
env-435	SRS018157_Baylor_scaffold_12494	-	682	619	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-436	SRS047634_LANL_scaffold_94015	-	848	785	RNA → ← RfaF (COG0859) heptsyl_trn_I (TIGR02193)
env-437	SRS015440_WUGC_scaffold_33201	+	172	235	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-438	SRS013949_WUGC_scaffold_20645	+	1423	1486	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-439	SRS013950_C2020939	+	249	312	RNA →
env-440	SRS019129_WUGC_scaffold_8522	+	436	499	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-441	SRS053917_LANL_scaffold_40839	-	230	167	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-442	SRS017445_C2959731	+	208	271	RNA →
env-443	SRS018394_C3997563	+	368	431	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-444	SRS045197_C3344225	+	229	292	RNA →
env-445	SRS013170_Baylor_scaffold_137087	+	944	1007	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-446	SRS024087_LANL_scaffold_38158	+	3632	3695	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-447	SRS055378_C3854289	+	246	309	RNA →
env-448	SRS055401_C2303800	+	358	421	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-449	SRS064449_C4092018	-	272	209	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Tvi-1-1	NZ_JYNJ01000035.1	-	80853	80804	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Tac-1-1	NZ_JYNI01000086.1	+	37893	37942	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-450	JGI24723J26617_10002644	+	13634	13692	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-451	JGI24723J26617_10002693	+	13459	13517	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-452	KGLS2_ANT06_2345m.c1007050	+	3448	3506	RNA →
env-453	CEWQ01046878.1	+	431	489	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-454	KGLS1_ANT01_95m.c10073717	+	821	879	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-455	KGLS2_ANT04_2345m.c1000317	+	1025	1083	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-456	KGLS1_ANT02_95m.c10008266	+	756	814	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-457	CESO01253667.1	+	628	686	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-458	JGI24724J26744_10001006	+	3321	3379	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

env-459	KGLS2_ANT04_2345m_c1002142	+	7997	8055	RNA→	
env-460	KGLS1_ANT01_95m_c10018623	+	2892	2950	RNA→	←hypo
env-461	KGLS1_ANT01_95m_c10184467	-	71	13	RNA→	←hypo
env-462	JCVI_SCAF_1101668217967	+	711	759	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-463	CETA01009654.1	-	3746	3690	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-464	CETX01104058.1	-	71	15	RNA→	
env-465	CEUK01157528.1	+	2126	2182	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Iba-1-1	NZ_CH672403.1	+	337077	337133	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-466	CETM01039028.1	+	1422	1478	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-467	CESO01134195.1	-	3172	3116	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-468	CETM01039027.1	+	30	86	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-469	JGI11881J13070_1002314	+	722	772	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-470	CEQC01048050.1	-	211	161	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-471	CEQH01152759.1	+	421	471	RNA→	
env-472	CEQK01044707.1	-	2989	2939	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-473	CESK01005100.1	-	13926	13876	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-474	CEVG01126604.1	-	447	397	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-475	CERU01038670.1	-	1641	1591	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-476	CETF01102798.1	+	365	415	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-477	CENV01129508.1	+	828	878	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-478	CESO01310600.1	+	1303	1353	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Isp-1-1	NZ_BANL01000034.1	+	133074	133124	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-479	CETA01011209.1	+	242	292	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ilo-2-1	NC_006512.1	+	2636814	2636864	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ilo-1-1	NC_021286.1	+	2636929	2636979	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-480	JGI24724J26744_10119556	+	251	301	RNA→	←hypo
env-481	CEGE01001000.1	-	1200	1150	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Vru-1-1	NZ_AJYK01000068.1	+	61091	61172	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-482	AUXO015586256.1	-	5177	5128	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-483	CEUX01028586.1	+	276	324	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ama-1-1	NZ_AUBY01000009.1	+	261972	262030	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ata-2-1	NZ_AUBZ01000002.1	+	259960	260018	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-484	topACOD_F95O9CU02IUQBW	+	144	205	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-485	JGI24739J22299_10000025	+	17932	17991	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-486	JGI24737J22298_10026474	+	1377	1436	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-2-1	NZ_JMJL01000007.1	-	24847	24788	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-1-1	NZ_JMJK01000008.1	-	22834	22775	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-3-1	NZ_JMJJ01000008.1	-	24828	24769	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-3-2	NZ_JFZU01000018.1	-	25163	25104	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-1-4	NZ_CAEI01000100.1	+	94980	95039	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-1-5	NZ_CAEJ01000213.1	+	94965	95024	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-4-1	NZ_AZTE01000093.1	-	24860	24801	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-8-1	NC_013956.2	-	4273458	4273399	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-10-1	NC_017554.1	+	198388	198447	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-6-1	NC_017531.1	-	3680829	3680770	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-7-1	NZ_KI440898.1	-	25142	25083	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-9-1	NC_016816.1	+	197910	197969	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-1-2	NZ_JQZZ01000153.1	+	20373	20432	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-49-1	NC_014837.1	-	4221521	4221464	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-45-1	NZ_LGIS01000015.1	+	106087	106144	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-50-1	NZ_AKIU01000004.1	+	105774	105831	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-53-1	NZ_AKIT01000110.1	-	22761	22704	RNA→	rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-487	JGI26055J44792.1011881	+	746	804	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-488	JGI25162J39368.1004374	+	567	625	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-489	JGI26052J44787.1009334	+	340	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-490	JGI26053J44789.1014726	-	757	699	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-491	JGI26057J44791.1022320	+	76	134	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-492	JGI26054J46599.1001267	-	4935	4877	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-41-1	NZ.JSUT01000007.1	+	90918	90976	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pag-4-1	NZ.ANKX01000043.1	-	23467	23409	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-54-1	NZ.AEDL01000016.1	-	22943	22885	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pst-4-1	NZ.AHIE01000032.1	+	133115	133173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pst-3-1	NZ.JPKO01000013.1	+	92601	92659	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pst-1-1	NZ.JRWI01000025.1	-	22125	22067	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pst-1-2	NZ.JSXF01000016.1	+	100240	100298	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-36-1	NZ.JMRT02000009.1	+	90963	91021	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pva-1-1	NZ.JPKP01000004.1	-	524677	524619	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pva-2-1	NC.014562.1	-	3321901	3321843	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-37-1	NZ.JQNO01000001.1	-	3712474	3712416	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-493	TrFG_G006Z1102HIXED	+	45	103	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pan-5-1	NZ.JXXL01000002.1	-	24189	24131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-52-1	NZ.AJFP01000001.1	-	750284	750226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-43-1	NZ.CP009880.1	-	1060052	1059996	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-494	JGI26051J44788.1011887	+	355	411	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-495	JGI26053J44789.1003248	-	1683	1627	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-496	JGI26052J44787.1008131	+	177	233	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-497	JGI26055J44792.1005306	-	1251	1195	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-498	JGI26057J44791.1000727	+	3248	3304	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-499	JGI26054J46599.1000150	-	5814	5758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pva-1-2	NZ.JUQR01000121.1	+	95265	95324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pse-1-1	NZ.CCAQ010000025.1	-	34969	34910	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-42-1	NZ.JPQA01000010.1	+	91852	91911	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pro-1-1	NZ.JTJJ01000012.1	+	100019	100075	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-46-1	NZ.JZRD01000022.1	-	22790	22734	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Prw-1-1	NZ.CP009454.1	+	660150	660206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-500	AECF_contig08144	+	2575	2631	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-38-1	NZ.JZRH01000036.1	-	22821	22765	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-501	APTF_contig25596	+	28	84	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-502	CLOF_contig32609	+	188	244	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eca-1-1	NZ.JRUP01000012.1	-	22784	22728	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-503	ACEF_contig13072	+	4745	4801	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-504	ACOFG987_contig06308	-	345	289	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-505	ACOFG988_contig23352	-	761	705	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-506	CLOF_contig29606	-	3568	3512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pst-5-1	NC.022546.1	+	2480650	2480706	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pdi-2-1	NZ.AVSS01000005.1	-	23665	23609	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-507	AECF_contig21769	-	377	320	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Tmo-1-1	NZ.JPKR02000005.1	-	545319	545262	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Tsp-2-1	NZ.JFJX01000045.1	-	21515	21458	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Tsa-1-1	NZ.ATMI01000006.1	+	58800	58857	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Tpt-1-1	NZ.ATMJ01000077.1	+	69932	69989	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Tpt-1-2	NZ.JMPR01000011.1	+	71180	71237	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-508	FGTFG_contig02879	+	93249	93307	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pag-2-1	NZ.JPKQ01000009.1	-	95475	95417	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Pag-5-1	NZ_BAEF01000013.1	-	23435	23377	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-39-1	NZ_LGYX01000019.1	+	92817	92875	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pan-1-3	NZ_JYGW01000002.1	+	93322	93380	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-51-1	NZ_ADWZ01000015.1	-	23434	23376	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pag-2-2	NZ_JFOK01000007.1	-	23564	23506	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pag-2-6	NZ_JPOT01000008.1	+	93015	93073	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pag-2-3	NZ_JNVA01000019.1	-	24939	24881	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pag-2-4	NZ_JNGC01000002.1	-	294027	293969	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pva-1-3	NZ_LFQL01000031.1	+	91121	91179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pag-3-1	NZ_KK403334.1	+	94095	94153	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pag-6-1	NZ_KI440944.1	+	94622	94680	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pag-2-5	NZ_JWLQ01000007.1	+	134357	134415	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-509	ACOFG987.contig03760	-	311	253	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-510	ACOFG988.F31SS7V02FQ5RM	+	210	268	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-48-1	NZ_ALXE01000044.1	-	21482	21425	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-511	AUXO014079757.1	+	108	157	RNA → ←hypo
env-512	HLNC_1000009	-	72348	72298	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-513	SR_TP_S2_1000441	+	2919	2968	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-514	SR_TTP_S3_1000590	+	2911	2960	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-515	SS_2KS_010_SOIL_10367424	+	142	192	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-516	SR_TP_S13sol_1000025	-	70388	70338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Isp-2-1	NZ_AFPO01000012.1	+	277955	278005	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-517	SS_3KL_010_SOIL_10380658	+	208	258	RNA → ←hypo
env-518	PML.READ_00685738	+	151	202	RNA →
Asp-8-1	NC_015554.1	+	4361206	4361257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-519	CESF01238860.1	+	483	534	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-520	TahiMoana_1000136	-	193	142	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vrh-1-1	NZ_JONG01000015.1	+	19747	19798	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-521	BMHBC_125854	-	1492	1439	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-522	BMHBC_2_2794853	+	48	101	RNA →
env-523	BMHBC_2_1493885	+	48	101	RNA →
env-524	BMHBC_2_2089384	+	48	101	RNA →
env-525	BMHBC_2_884118	-	73	20	RNA → hypo →
env-526	BMHBC_2_3380210	+	48	101	RNA →
Spu-2-1	NC_009438.1	+	601661	601714	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spu-1-1	NC_017566.1	+	532157	532210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-9-1	NC_008750.1	-	4138866	4138813	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-5-1	NZ_AFOZ01000042.1	-	15569	15516	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sba-3-1	NC_009052.1	-	4515864	4515810	rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sba-7-1	NC_011663.1	+	571662	571716	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sba-5-1	NC_009665.1	+	541101	541155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sba-2-1	NC_017579.1	-	4615835	4615781	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sba-1-1	NC_017571.1	+	651813	651867	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sba-4-1	NZ_CM001435.1	-	4392352	4392298	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sba-6-1	NC_009997.1	+	570132	570186	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sba-9-1	NC_016901.1	+	566504	566558	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sba-8-1	NZ_AGEX01000011.1	-	113918	113864	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-527	3300001239_10036133	-	345	291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-528	3300001605_10743065	-	345	291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-1-1	NZ_JPEO01000004.1	+	103613	103665	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sco-1-1	NZ_JAEC01000006.1	+	43528	43580	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Ssp-4-1	NZ_JWGX01000031.1	-	43326	43275	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sam-2-1	NC_008700.1	+	552817	552869	RNA → ←-hypo
Son-1-1	NC_004347.2	-	4279346	4279296	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-10-1	NZ_JTLE01000094.1	+	2661313	2661363	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-529	KGLS1_ANT02_95m_c10000044	+	8538	8592	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Swo-1-1	NC_010506.1	-	5359927	5359875	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sse-1-1	NC_009831.1	+	655635	655687	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbe-1-1	NZ_ABIC01000023.1	+	45676	45728	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Svi-1-1	NC_014012.1	+	337588	337640	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-530	JCVL_SCAF_1096627387720	-	14506	14454	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo →
env-531	GO4KUYH01CXCC6	+	142	194	RNA →
env-532	GO4KUYH01C3ZKW	+	141	193	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-533	GooDraft_1002869	+	3149	3201	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-8-1	NZ_AKZL01000033.1	-	34459	34407	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sxi-1-1	NZ_JGVI01000084.1	+	35320	35372	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-7-1	NC_008322.1	+	522940	522992	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sde-1-1	NZ_AXZL01000063.1	+	70809	70861	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-534	JCVL_SCAF_1096627387716	-	23316	23264	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo →
Ssp-2-1	NC_008577.1	-	4408636	4408584	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-6-1	NC_008321.1	-	4178394	4178342	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sma-2-1	NZ_BALM01000013.1	+	59899	59951	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Spi-1-1	NC_011566.1	+	499660	499712	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-3-1	NZ_JSFF01000009.1	-	106570	106518	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ssp-11-1	NZ_JPII01000042.1	+	12098	12150	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Slo-1-1	NC_009092.1	+	431236	431288	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Swa-1-1	NZ_KI912497.1	-	254535	254484	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sde-2-1	NC_007954.1	-	3997631	3997580	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-535	KGLS1_ANT01_95m_c10083218	-	640	588	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sha-1-1	NC_010334.1	-	4683887	4683836	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Spe-1-1	NC_009901.1	-	4591286	4591235	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfi-1-1	NZ_JADX01000010.1	-	251293	251242	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfr-1-1	NC_008345.1	-	4467060	4467008	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
CR-1-1	NZ_GL379589.1	-	502536	502482	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eba-2-1	NZ_DF158888.1	+	91727	91780	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sgl-1-1	NC_007712.1	-	3774802	3774749	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
CSO-1-1	NZ_CP006568.1	+	939488	939543	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-536	XAGC_contig20879	-	400	347	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Spr-1-1	NZ_CP006569.1	-	4560293	4560240	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-47-1	NZ_JRKB01000114.1	-	29350	29291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psh-1-1	NZ_JWHQ01000025.1	-	1797	1738	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psh-2-1	NZ_KB944511.1	-	1649396	1649337	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Aal-2-1	NZ_BARX01000001.1	-	16360	16301	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-537	GO4KUYH02HSOZH	-	181	129	RNA → hypo →
Pte-1-1	NZ_JONU01000008.1	+	256804	256856	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo
env-538	3300000052_491248	+	102	154	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-539	3300000052_373220	-	197	145	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Tli-1-1	NZ_AZUK01000001.1	+	2305027	2305077	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Tau-1-1	NC_012691.1	+	541965	542015	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ana-1-1	NZ_AUCC01000060.1	-	4940	4890	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Aen-3-1	NZ_JRLH01000010.1	+	51375	51425	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Asa-10-1	NZ_KB894494.1	-	58337	58287	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Iat-1-1	NZ_JPIN01000002.1	-	98575	98527	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Ise-1-1	NZ_AUHL01000006.1	-	66251	66203	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Isa-1-1	NZ_JPER01000004.1	+	235268	235316	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ixi-1-1	NZ_AMRG01000014.1	-	30706	30654	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-540	AYRE01004792.1	-	218	167	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Osm-1-1	NZ_KB908459.1	+	180853	180904	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Osp-1-1	NC_016745.1	+	726676	726727	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-541	2231941556	+	4	58	RNA →
Ema-2-1	NZ_JFHN01000029.1	+	87873	87932	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Etr-1-1	NZ_JXNU01000003.1	+	3289663	3289722	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Etr-2-1	NZ_KE136311.1	-	127906	127847	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-40-1	NZ_JFGT01000004.1	-	137795	137735	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ein-1-1	NZ_JRFX01000015.1	-	23356	23296	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ein-1-2	NZ_JRXE01000029.1	-	23448	23388	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-542	JGI26052J44787_1013371	+	333	393	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-543	JGI26055J44792_1089657	+	258	318	RNA →
env-544	JGI26057J44791_1023823	-	676	616	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-545	JGI26054J46599_1079959	+	92	152	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eto-1-1	NZ_KB372804.1	-	1363173	1363113	RNA → ←-hypo
Esp-55-1	NZ_JQNE01000001.1	+	4128718	4128777	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eol-1-1	NZ_JNVB01000002.1	+	112156	112215	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ebi-2-1	NC_014306.1	+	171661	171721	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ebi-1-1	NZ_LHXI01000018.1	+	107630	107690	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
bsy-1-1	NZ_JMSO01000006.1	+	18997	19057	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Epy-2-1	NC_012214.1	+	161194	161254	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Epy-1-1	NC_017390.1	+	161200	161260	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-74-1	NC_017445.1	+	1434028	1434088	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eta-9-1	NC_010694.1	+	140209	140269	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Epi-2-1	NZ_CAHS01000002.1	+	113089	113149	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo →
Eam-1-1	NZ_BAYW01000017.1	-	21692	21632	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eam-10-1	NZ_CAOX01000002.1	+	109737	109797	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eam-8-1	NC_013961.1	+	156303	156363	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eam-5-1	NC_013971.1	+	156303	156363	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo → hypo → hypo → hypo →
Eam-4-1	NZ_AFH01000002.1	+	109783	109843	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eam-15-1	NZ_CAPC01000002.1	+	109783	109843	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eam-11-1	NZ_CAPD01000002.1	+	97809	97869	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eam-9-1	NZ_CAOY01000002.1	+	109776	109836	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eam-6-1	NZ_CAPB01000002.1	+	109783	109843	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eam-7-1	NZ_CAOZ01000002.1	+	109749	109809	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eam-3-1	NZ_CAPA01000002.1	+	109783	109843	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eam-13-1	NZ_CBVT010000002.1	+	109584	109644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eam-14-1	NZ_CBVU010000002.1	+	109584	109644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eam-12-1	NZ_CBVS010000002.1	+	109584	109644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ety-1-1	NZ_JRUQ01000016.1	+	133327	133387	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-546	XAGC_contig27338	+	221	281	RNA → ←-hypo
Psp-44-1	NZ_CP009866.1	-	3634114	3634055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-547	CETM01121351.1	-	624	574	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-548	CEVA01063086.1	-	14576	14526	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pru-3-1	NZ_JXXY01000018.1	-	149896	149846	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pru-3-2	NZ_JXXZ01000010.1	-	626883	626833	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pru-4-1	NZ_AOPM01000105.1	+	40951	41001	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-549	CEPZ01177373.1	+	388	438	rpmE (PRK00019) Ribosomal_L31 (pfam01197) → RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Psp-33-1	NZ_AHCE02000021.1	+	18594	18644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ppi-1-1	NZ_CP009888.1	-	346889	346839	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pci-1-1	NZ_AHBZ02000178.1	-	16984	16934	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Plu-2-1	NZ_AUSV01000022.1	-	2218	2166	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Plu-3-1	NZ_CAPN01000031.1	-	44749	44698	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-550	CERC01133101.1	-	82	31	RNA →
Ppi-3-1	NZ_KB907371.1	-	399235	399184	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ppi-4-1	NZ_AHCC02000195.1	+	23369	23420	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ppi-2-1	NZ_JXXX01000108.1	-	44988	44937	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pfi-1-1	NZ_JH650748.1	+	23482	23533	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pel-1-1	NZ_JWIH01000018.1	+	24597	24648	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ppi-2-2	NZ_JXXW0100011.1	+	23330	23381	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-15-1	NZ_AKXJ01000003.1	-	426568	426517	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-551	CEPQ01102968.1	-	435	384	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-552	JGI11829J13087.107135	-	139	88	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-553	JGI12020J13220.1000475	-	5069	5018	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-554	CEPV01195072.1	+	400	451	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-555	CEPZ01204578.1	+	666	717	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-556	CEQE01276759.1	+	560	611	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-557	CETV01108507.1	+	476	527	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-558	CEUK01292042.1	+	691	742	RNA →
env-559	CEQG01236191.1	+	694	745	RNA →
env-560	CERC01031317.1	-	852	801	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-561	CERD01031679.1	+	5331	5382	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-562	CERL01075421.1	+	216	267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-563	CETA01065829.1	-	448	397	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-564	CEUX01031767.1	+	2189	2240	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-565	CEWB01087664.1	-	382	331	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-566	JGI11949J13268.1006774	+	325	376	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-567	CESF01139237.1	-	14048	13997	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-568	CEUD01330189.1	+	1588	1639	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-569	CEUO01029621.1	+	332	383	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-570	CEWI01244144.1	-	323	272	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-571	_GX4VOVV01DM434	-	83	32	RNA → hypo →
Psp-17-1	NZ_AJTK01000019.1	-	4461	4410	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-1-1	NZ_JONX01000008.1	+	64919	64970	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-14-1	NZ_JQFL01000080.1	-	131090	131039	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-572	CENU01396304.1	+	1029	1080	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-8-1	NZ_BADW01000079.1	+	29656	29707	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-573	JGI11838J13071.130222	-	91	40	RNA → hypo →
env-574	JGI11906J13219.100106	+	2033	2084	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-575	JGI12020J13220.1008982	-	426	375	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-576	JGI11754J13217.1001331	-	2564	2513	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-577	JGI12218J13221.1000027	-	540	489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-578	JGI12218J13221.1000194	+	1789	1840	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-579	JGI11931J13222.1012993	-	124	73	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-580	JGI12156J13080.113928	+	216	267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-581	CENZ01163183.1	+	102	153	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-582	CEQS01011751.1	-	21184	21133	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-583	CERC01016695.1	-	2342	2291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-584	CERD01038299.1	+	663	714	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-585	CERE01031172.1	+	6395	6446	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-586	CESS01027590.1	-	156	105	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-587	CETM01162887.1	+	1686	1737	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-588	JGI24025J20009.10001015	+	10992	11043	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pag-1-1	NZ_APME01000074.1	+	65874	65925	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-16-1	NZ_AZIO01000115.1	-	148851	148800	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-589	CERE01032072.1	-	203	152	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-590	CERL01102156.1	+	104	155	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-24-1	NC_014803.1	+	329863	329914	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-23-1	NZ_KK070023.1	+	1202960	1203011	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-31-1	NZ_AUTH01000084.1	+	64821	64872	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-2-1	NZ_JADO01000011.1	+	64319	64370	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-3-1	NZ_JIAM01000011.1	+	64044	64095	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-4-1	NZ_JPMC01000016.1	+	210417	210468	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-591	CEQG01078170.1	+	93	144	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-592	CETF01103377.1	-	841	790	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pli-1-1	NZ_KK070036.1	-	168509	168458	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-6-1	NZ_BADU01000157.1	+	29544	29595	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-593	LAZR01004165.1	-	5394	5343	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pdi-1-1	NZ_JWIG01000001.1	-	843923	843872	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pha-1-1	NZ_ADOP01000005.1	+	8477	8528	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-5-1	NZ_AUTK01000406.1	+	27446	27497	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-30-1	NZ_AUTOI01000314.1	-	2912	2861	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pfl-2-1	NZ_JTDZ01000012.1	-	588159	588108	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-26-1	NZ_AUTN01000149.1	+	65662	65713	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-27-1	NZ_AUTL01000176.1	-	12649	12598	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-28-1	NZ_AUTM01000342.1	-	54996	54945	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-594	JGI24025J20009.10000510	+	30088	30139	RNA →
Pun-1-1	NZ_AHCF02000035.1	-	124891	124840	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Aba-1-1	NZ_AAVS01000013.1	+	62431	62482	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-595	JCVL_SCAF_1096626478483	-	754	703	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-596	JGI11906J13219.116351	+	271	322	RNA →
env-597	CESU01212683.1	+	608	659	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-598	A09P201000a_Sequence0000002282	-	1478	1427	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pma-1-1	NZ_AHCB02000038.1	+	62021	62072	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-13-1	NZ_JWGY01000001.1	+	61985	62036	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-9-1	NZ_BADX01000055.1	+	23372	23423	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pha-2-1	NZ_AHCA01000009.1	-	150446	150395	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-11-1	NZ_BADT01000142.1	+	28576	28627	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-32-1	NZ_AUTQ01000186.1	-	26876	26825	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-19-1	NZ_JXYD01000037.1	-	57348	57297	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-12-1	NZ_AMYA01000022.1	-	2067	2016	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-20-1	NZ_JJNY01000024.1	-	36149	36098	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-10-1	NZ_BADY01000117.1	-	2048	1997	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pfu-1-1	NZ_JJNZ01000017.1	+	69496	69547	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-599	wf3_Contig4170	+	986	1037	RNA →
env-600	LV_Brine_h2_0102_1000031	+	5692	5743	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pha-3-1	NC_007481.1	-	2892806	2892755	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pru-1-1	NZ_JXYA01000021.1	+	73438	73489	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pru-1-2	NZ_LFZX01000030.1	+	37188	37239	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pru-2-1	NZ_AHCD02000031.1	+	22677	22728	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Plu-4-1	NZ_AUXW01000198.1	-	44235	44184	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Plu-1-1	NZ_JWIC01000001.1	+	71814	71865	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Par-1-1	NZ_AHBY02000081.1	-	369	318	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-21-1	NZ_AUTS01000045.1	+	48461	48512	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-22-1	NZ_AUTR01000020.1	-	193290	193239	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-29-1	NZ_AUTJ01000247.1	+	71641	71692	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo →
Psp-25-1	NZ_AUTP01000215.1	+	15068	15119	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-7-1	NZ_BADV01000031.1	-	2245	2194	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-601	CEUP01039342.1	-	391	340	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-602	CEVA01501963.1	-	276	225	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-603	CEPZ01051150.1	-	473	422	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-604	CEQS01116987.1	+	480	531	RNA →
env-605	TCCM_contig09952	-	265	214	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psp-1-1	NZ_BBIN01000213.1	-	19009	18959	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ptu-1-1	NZ_AA0H01000003.1	+	284768	284818	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-606	ABM01022972.1	+	23	75	RNA →
Eca-5-1	NZ_AJYH01000066.1	-	21608	21558	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eca-7-1	NZ_AJYF01000130.1	+	138107	138157	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eca-4-1	NZ_AJYG01000029.1	+	139048	139098	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eca-6-1	NZ_KK211219.1	+	164382	164432	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Gho-1-1	NZ_ADAQ01000008.1	-	84673	84623	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Gsp-4-1	NZ_ANFM02000002.1	-	72505	72455	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Gsp-3-1	NZ_LASY01000133.1	+	6375	6425	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eno-3-1	NZ_AJWN01000101.1	+	97798	97847	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eno-2-1	NZ_AJYD01000004.1	+	100008	100057	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eno-1-1	NZ_AJYE01000099.1	+	19319	19368	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-607	JGI24724J26744.10298770	-	465	419	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-608	3300000513.101996	-	1403	1355	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-609	3300001239.10010964	-	1403	1355	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-610	3300001605.10069366	-	1992	1944	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Tsp-1-1	NZ_JQDZ01000010.1	-	1358	1309	RNA → ← hypō
Pha-5-1	NZ_AWXP01000020.1	+	164833	164882	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo → HipA (COG3550) PRK09775 (PRK09775) HTH_ARSR (cd00090) →
Pvu-2-1	NZ_KN150745.1	-	686197	686148	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pmi-3-1	NC_022000.1	+	3534400	3534449	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-611	JGI24707J26582.10420588	+	135	189	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ffu-1-1	NZ_AUGL01000001.1	-	147568	147519	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Fky-1-1	NZ_AUDJ01000001.1	+	302704	302753	RNA → ← hypō
Asi-1-1	NZ_CDBY01000035.1	+	3638	3691	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → SRPBCC (cd07812) YbjT (COG0702) DUF2867 (pfam11066) NAD_binding_10 (pfam13460) →
Afi-1-1	NZ_JRGK01000350.1	-	15755	15703	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Aja-1-1	NZ_JWJR01000011.1	-	124061	124009	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Adh-1-1	NZ_CDBP01000004.1	+	72490	72542	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Adh-1-2	NZ_CDBH01000029.1	+	72699	72751	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Aen-2-1	NZ_LDWG01000014.1	-	162402	162350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Adh-1-3	NZ_JDWD01000154.1	+	20498	20550	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ahy-4-1	NZ_JEMK01000035.1	+	72881	72933	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ahy-18-1	NZ_CP007518.1	+	4401696	4401748	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ahy-17-1	NZ_JH815591.1	-	3833332	3833280	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ahy-2-1	NZ_ANPN01000010.1	-	162590	162538	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ahy-9-1	NZ_AOBQ01000006.1	+	72707	72759	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ahy-8-1	NZ_AOBP01000008.1	-	131017	130965	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ahy-6-1	NZ_AOBO01000002.1	-	186283	186231	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Ahy-3-1	NZ_AOBM01000003.1	-	130263	130211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ahy-5-1	NZ_AOBN01000020.1	+	72684	72736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aaq-1-1	NZ_BAFL01000026.1	+	72708	72760	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aja-1-2	NZ_CDBV01000003.1	+	54015	54067	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asp-2-1	NZ_JXIR01000034.1	-	113264	113212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ala-1-1	NZ_JRGM01000150.1	+	53033	53085	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aja-2-1	NZ_JFDL01000010.1	+	54457	54509	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aau-1-1	NZ_CDDH01000054.1	-	10218	10166	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Amo-1-1	NZ_AQGQ01000086.1	-	10566	10515	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Api-1-1	NZ_CDBL01000057.1	-	131319	131268	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asa-5-1	NZ_CDDW01000113.1	-	28277	28226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Apo-1-1	NZ_CDBI01000047.1	+	73787	73838	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asa-5-2	NZ_JXTA01000018.1	+	52404	52455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asa-3-1	NZ_BAWQ01000020.1	-	14307	14256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asa-4-1	NZ_ARYZ02000006.1	-	52708	52657	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ahy-16-1	NZ_AMQA01000007.1	+	48674	48725	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asa-6-1	NZ_AGVO01000060.1	+	52105	52156	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asa-7-1	NC_009348.1	+	140845	140896	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asa-2-1	NZ_AMQG02000058.1	-	13927	13876	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asa-5-3	NZ_JRYW01000019.1	+	52405	52456	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asa-5-4	NZ_JRYV01000091.1	-	17030	16979	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-612	JCVI_SCAF_1096627194609	-	4672	4621	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → YbjT (COG0702)DUF2867 (pfam11066)NAD_binding_10 (pfam13460) →
Ahy-21-1	NZ_CDDC01000091.1	-	122529	122478	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ahy-11-1	NZ_JFJO01000068.1	-	10099	10048	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ahy-20-1	NC_008570.1	-	4646089	4646038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ahy-14-1	NC_021290.1	-	4925796	4925745	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ahy-12-1	NZ_CP007566.1	-	4925161	4925110	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ahy-19-1	NZ_CP007576.1	-	4925129	4925078	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ahy-13-1	NZ_CP006883.1	+	142305	142356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ahy-1-1	NZ_CP010947.1	-	4784963	4784912	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ahy-1-2	NZ_CP011100.1	+	204318	204369	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ahy-15-1	NZ_CP006870.1	+	142342	142393	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ahy-7-1	NZ_JEML01000047.1	+	52150	52201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Abi-1-1	NZ_CDBT01000035.1	-	149827	149776	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-613	GooDraft_1010177	+	247	298	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aso-1-1	NZ_CDBW01000004.1	+	44945	44996	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aen-2-2	NZ_CDDE01000010.1	+	51645	51696	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Afl-1-1	NZ_CDBO01000009.1	+	51638	51689	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ave-1-1	NZ_CDDU01000053.1	+	54632	54683	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aen-2-3	NZ_CDCG01000034.1	-	93277	93226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ave-9-1	NZ_CDDK01000028.1	+	53357	53408	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ave-1-2	NZ_CDBU01000031.1	+	53055	53106	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ave-7-1	NZ_ATFB01000030.1	-	126444	126393	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ave-1-3	NZ_JRBE01000009.1	-	111575	111524	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ave-6-1	NC_015424.1	-	171080	171029	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ave-3-1	NZ_JH815586.1	+	52965	53016	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ave-2-1	NZ_JH815583.1	+	55914	55965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ave-4-1	NZ_JH823256.1	-	1129313	1129262	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ave-5-1	NZ_JH815589.1	+	321999	322050	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ave-8-1	NZ_CDBQ01000036.1	+	53773	53824	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asp-3-1	NZ_JRJV01000041.1	-	59091	59040	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Aal-1-1	NZ.CDCB01000029.1	+	53445	53496	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Aal-1-2	NZ.CDBR01000043.1	+	32916	32967	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-614	GO4KUYH01ENIZ1	+	340	391	RNA→ rpmE (PRK00528)rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
env-615	JGI11944J13513.1007729	+	807	858	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Aen-1-1	NZ.CDDI01000023.1	-	131318	131267	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ahy-10-1	NZ.CP006579.1	-	4352087	4352036	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-616	JGI26532J50257.10010618	-	2542	2491	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-617	JGI26536J50258.1000749	+	19423	19474	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-618	JGI26540J51217.10020906	+	793	844	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Asa-8-1	NZ.CDBN01000071.1	-	4965	4914	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Aca-2-1	NZ.CACP01000112.1	-	130878	130827	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Asp-1-1	NZ.JEMQ01000008.1	+	76191	76242	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Aca-1-1	NZ.KQ087569.1	-	134377	134326	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Asp-4-1	NZ.JRQJ01000349.1	-	10593	10542	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ata-1-1	NZ.BAWK01000091.1	-	20016	19965	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ata-1-2	NZ.CDDD01000058.1	-	134875	134824	SRPBCC (cd07812)YbjT (COG0702)DUF2867 (pfam11066)NAD_binding_10 (pfam13460)→ RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ari-1-1	NZ.CDBJ01000055.1	+	6337	6388	SRPBCC (cd07812)YbjT (COG0702)DUF2867 (pfam11066)NAD_binding_10 (pfam13460)→ RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ate-1-1	NZ.CDCA01000034.1	+	49892	49942	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ame-1-1	NZ.CDBZ01000101.1	-	64689	64639	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ame-1-2	NZ.JRBF01000002.1	-	94963	94913	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ame-2-1	NZ.CP007567.1	-	4055949	4055899	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ame-1-3	NZ.JRBG01000006.1	-	70612	70562	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Aaq-2-1	NZ.JRGL01000008.1	-	78368	78318	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-619	XAGC.contig09808	-	443	393	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Abe-1-1	NZ.CDDA01000005.1	-	159579	159529	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Asa-1-1	NZ.JPWL01000105.1	-	218920	218870	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Aeu-1-1	NZ.CDDF01000018.1	-	151708	151658	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Asc-1-1	NZ.Cddb01000021.1	+	125280	125333	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Adi-2-1	NZ.CDCE01000027.1	-	19201	19148	SRPBCC (cd07812)YbjT (COG0702)DUF2867 (pfam11066)NAD_binding_10 (pfam13460)→ RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Adi-1-1	NZ.APVG01000009.1	+	71044	71097	SRPBCC_CalC_Aha1-like_GntR-HTH (cd08893)YbjT (COG0702)DUF2867 (pfam11066)NAD_binding_10 (pfam13460)→ RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-620	GSLASAS_contig00578	-	2300	2248	SRPBCC_CalC_Aha1-like_GntR-HTH (cd08893)YbjT (COG0702)DUF2867 (pfam11066)NAD_binding_10 (pfam13460)→ RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-15-1	NZ.AQOD01000036.1	-	8278	8226	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-14-1	NZ.AQOE01000001.1	-	17831	17779	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-621	CEGE01004975.1	-	1222	1170	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-622	GSLASAS_contig00020	+	11479	11531	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sco-3-1	NZ.AQOF01000004.1	+	41661	41713	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-623	GSLASAS_contig02665	+	1265	1317	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Ssp-27-1	NZ.LAQR01000036.1	+	121364	121416	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Psp-57-1	NZ.AMZO01000033.1	-	59095	59042	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-11-1	NZ.JZSW01000011.1	+	88087	88139	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-12-1	NZ.CH902603.1	-	60950	60898	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-11-2	NZ.JZSO01000016.1	+	86032	86084	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-11-3	NZ.JZSN01000009.1	-	60994	60942	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-11-4	NZ.JZSS01000006.1	+	115493	115545	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-11-5	NZ.JZSY01000010.1	+	90276	90328	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-11-6	NZ.JZSZ01000011.1	+	90260	90312	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-11-7	NZ.JZSU01000008.1	-	60993	60941	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Pan-11-8	NZ.JZST01000009.1	+	115491	115543	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

Pan-11-9	NZ_JZSM01000004.1	-	135032	134980	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pda-2-1	NZ_JZSI01000010.1	+	90276	90328	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pan-11-10	NZ_JZSV01000008.1	-	60990	60938	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pan-11-11	NZ_JZSX01000009.1	+	90266	90318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pan-11-12	NZ_JZTA01000010.1	+	90591	90643	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-58-1	NZ_AAOU01000028.1	+	15095	15147	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pap-1-1	NZ_LDVO01000029.1	-	41563	41511	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psa-1-1	NZ_JGVO01001562.1	+	1691	1743	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Paq-2-1	NZ_LDOT01000005.1	+	157449	157501	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pga-2-1	NZ_CP005974.1	+	545149	545201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pga-1-1	NZ_JWLZ01000213.1	-	58688	58636	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ple-1-1	NZ_JZSL01000002.1	-	60040	59988	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ple-1-2	NZ_JZSK01000007.1	-	60039	59987	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ple-3-1	NZ_DF093598.1	-	93166	93114	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ple-2-1	NZ_DF196819.1	-	1468186	1468134	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pda-4-1	NZ_KB405046.1	+	159586	159638	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pda-3-1	NZ_ADBS01000001.1	+	3048450	3048502	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psw-1-1	NZ_LELC01000008.1	+	114365	114416	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pph-1-1	NZ_JZSJ01000013.1	+	34239	34290	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pki-1-1	NZ_JZTD01000009.1	-	53868	53817	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pki-1-2	NZ_JZTE01000008.1	-	53868	53817	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pki-1-3	NZ_JZTC01000007.1	-	53870	53819	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pki-1-4	NZ_JZTB01000007.1	-	53867	53816	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pil-1-1	NZ_JZSQ01000007.1	+	107422	107473	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pil-1-2	NZ_JZSR01000004.1	+	109269	109320	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pki-1-5	NZ_JZSP01000008.1	-	26274	26223	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pha-6-1	NZ_JWYV01000006.1	-	63341	63289	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pha-7-1	NZ_AULG01000012.1	+	172893	172945	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pga-3-1	NZ_JMIB01000030.1	-	62198	62146	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pga-4-1	NZ_LDOU01000024.1	-	60173	60119	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ppr-1-1	NZ_CH724140.1	-	69796	69744	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-624	KGLS1_ANT01_95m_c10724678	+	129	181	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Ppr-2-1	NC_006370.1	+	266374	266426	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
VeZ-1-1	NZ_BATM01000037.1	+	129339	129390	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vha-1-1	NZ_BAUJ01000003.1	+	79401	79452	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-625	ASRK010000687.1	-	597	548	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpr-1-1	NZ_BATJ01000004.1	+	154354	154404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vbr-2-1	NZ_AKXW01000019.1	-	57344	57294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vbr-3-1	NZ_AJYM01000057.1	-	57302	57252	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vbr-4-1	NZ_AJYL01000130.1	+	139283	139333	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Fse-1-1	NZ_AUGM01000007.1	-	231862	231812	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vmy-1-1	NZ_JXOK01000076.1	-	101239	101190	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-27-1	NZ_JZAM01000160.1	-	49297	49246	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vna-2-1	NZ_JMCF01000037.1	-	19898	19847	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vna-2-2	NZ_JMCI01000042.1	+	6951	7002	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vna-2-3	NZ_JMCH01000025.1	+	16370	16421	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vna-2-4	NZ_JMCG01000001.1	+	496985	497036	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vvu-8-1	NC_014965.1	+	326873	326924	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsa-1-1	NZ_BAOJ01000037.1	-	34285	34235	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vaz-1-1	NZ_BAOB01000011.1	+	28481	28531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vaz-1-2	NZ_BATL01000020.1	-	35437	35387	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vro-3-1	NZ_AFAJ01000015.1	+	3027	3077	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Vro-2-1	NZ_BAOI01000078.1	-	79201	79151	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vhy-1-1	NZ_BBLF01000022.1	+	27647	27697	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vja-1-1	NZ_BBKZ01000028.1	-	303783	303733	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vhy-1-2	NZ_BBLD01000021.1	-	69972	69922	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vja-1-2	NZ_BBLA01000033.1	-	289672	289622	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vja-3-1	NZ_BAOG01000025.1	-	30346	30296	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vna-1-1	NZ_ATFJ01000038.1	+	148901	148951	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vna-1-2	NZ_ATWU01000061.1	+	212711	212761	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-6-1	NC_016613.1	+	288935	288985	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vja-4-1	NZ_BAOA01000021.1	+	69740	69790	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-87-1	NZ_AWMB01000121.1	-	5724	5674	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-88-1	NZ_AWMA01000113.1	+	9881	9931	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-156-1	NZ_AWJK01000001.1	+	63708	63758	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Val-2-1	NZ_LFZC01000032.1	-	106376	106326	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-240-1	NZ_AVPW01000029.1	+	19681	19731	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-238-1	NZ_AOOW01000293.1	+	7296	7346	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-94-1	NZ_AWLU01000147.1	+	8348	8398	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vhy-1-3	NZ_BBLE01000010.1	+	164226	164276	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-626	GSLAS_GLMUJHB02HDDBS	+	419	469	RNA →
Vpa-47-1	NZ_BBQD01000006.1	+	238207	238257	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-23-1	NZ_AOOZ01000001.1	+	266710	266760	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-21-1	NZ_AOOY01000012.1	+	32552	32602	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-237-1	NZ_AOOV01000001.1	+	266710	266760	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-140-1	NZ_AWKA01000014.1	-	5727	5677	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-126-1	NZ_AWKO01000078.1	-	5726	5676	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-70-1	NZ_AWMS01000089.1	-	14428	14378	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-125-1	NZ_AWKP01000009.1	+	52752	52802	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-78-1	NZ_AWMK01000010.1	+	51675	51725	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-83-1	NZ_AWMF01000124.1	+	8335	8385	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-66-1	NZ_AWMW01000061.1	+	23084	23134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-124-1	NZ_AWMQ01000001.1	+	47328	47378	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-127-1	NZ_AWKN01000016.1	+	40862	40912	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-24-1	NZ_AVPV01000004.1	+	421744	421794	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-33-1	NZ_JFFP01000029.1	+	224759	224809	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-45-1	NZ_ACKB01000038.1	-	1783	1733	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-71-1	NZ_AWMR01000251.1	-	5731	5681	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-62-1	NZ_AWNA01000002.1	-	5725	5675	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-69-1	NZ_AWMT01000122.1	-	5724	5674	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-65-1	NZ_AWMX01000034.1	-	5716	5666	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-61-1	NZ_AWNB01000020.1	-	5751	5701	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
VPa-1-1	NZ_AXNJ01000046.1	+	227758	227808	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
VPa-2-1	NZ_AXNK01000046.1	+	264322	264272	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-60-1	NZ_AWNC01000013.1	+	26584	26634	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-48-1	NZ_AVOM01000003.1	-	321091	321041	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-77-1	NZ_AWML01000131.1	+	8341	8391	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-63-1	NZ_AWMZ01000037.1	-	5720	5670	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-64-1	NZ_AWMY01000005.1	+	66806	66856	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-59-1	NZ_AWND01000118.1	-	5744	5694	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-27-1	NZ_JNUE01000003.1	+	14971	15021	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-55-1	NZ_ACFM01000100.1	-	2781	2731	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-84-1	NZ_AWME01000007.1	-	9036	8986	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-30-1	NZ_ACFN01000016.1	-	2994	2944	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Vpa-95-1	NZ_AWLT01000086.1	-	2796	2746	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-53-1	NZ_AOCL01000001.1	-	15138	15088	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-224-1	NZ_AXNM01000020.1	-	145227	145177	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-232-1	NZ_AVON01000009.1	+	26500	26550	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-132-1	NZ_AWKI01000110.1	-	15116	15066	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-123-1	NZ_AWKR01000136.1	-	4460	4410	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-118-1	NZ_AWKW01000003.1	+	77006	77056	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-113-1	NZ_AWLB01000029.1	+	25233	25283	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-144-1	NZ_AWJW01000077.1	-	5722	5672	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-131-1	NZ_AWKJ01000063.1	+	13874	13924	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-121-1	NZ_AWKT01000003.1	+	95261	95311	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-117-1	NZ_AWKX01000001.1	-	5719	5669	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-116-1	NZ_AWKY01000001.1	-	5725	5675	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-103-1	NZ_AWLL01000285.1	-	3101	3051	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-138-1	NZ_AWKC01000048.1	+	24625	24675	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-128-1	NZ_AWKM01000125.1	+	8342	8392	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-119-1	NZ_AWKV01000122.1	-	5717	5667	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-114-1	NZ_AWLA01000080.1	+	14625	14675	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-101-1	NZ_AWLN01000126.1	+	8426	8476	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-143-1	NZ_AWJX01000108.1	+	10341	10391	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-139-1	NZ_AWKB01000002.1	+	88686	88736	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-130-1	NZ_AWKK01000008.1	+	45640	45690	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-129-1	NZ_AWKL01000001.1	+	92746	92796	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-120-1	NZ_AWKU01000205.1	+	16	66	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-115-1	NZ_AWKZ01000276.1	+	16	66	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-111-1	NZ_AWLD01000121.1	+	10001	10051	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-154-1	NZ_AWJM01000096.1	-	2751	2701	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-141-1	NZ_AWJZ01000006.1	-	4398	4348	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-155-1	NZ_AWJL01000004.1	+	42147	42197	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-151-1	NZ_AWJP01000158.1	-	5710	5660	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-137-1	NZ_AWKD01000009.1	+	41289	41339	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-153-1	NZ_AWJN01000089.1	-	5718	5668	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-98-1	NZ_AWLQ01000252.1	+	22	72	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-152-1	NZ_AWJO01000079.1	+	13233	13283	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-212-1	NZ_AWHG01000024.1	+	37943	37993	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-178-1	NZ_AWIO01000008.1	-	5716	5666	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-177-1	NZ_AWIP01000091.1	-	2793	2743	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-173-1	NZ_AWIT01000001.1	-	5739	5689	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-198-1	NZ_AWHU01000008.1	+	37741	37791	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-180-1	NZ_AWIM01000008.1	-	5714	5664	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-175-1	NZ_AWIR01000001.1	+	88686	88736	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-196-1	NZ_AWHW01000005.1	+	37727	37777	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-176-1	NZ_AWIQ01000002.1	+	95269	95319	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-171-1	NZ_AWIV01000001.1	-	5726	5676	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-164-1	NZ_AWJC01000010.1	-	5713	5663	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-167-1	NZ_AWIZ01000002.1	-	5741	5691	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-163-1	NZ_AWJD01000006.1	-	5709	5659	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-162-1	NZ_AWJE01000001.1	+	50993	51043	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-56-1	NC_004603.1	+	266709	266759	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-18-1	NZ_KI912682.1	-	314852	314802	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-44-1	NZ_KI929149.1	-	315229	315179	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-54-1	NZ_KI929565.1	+	25058	25108	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Vpa-31-1	NZ_KI911857.1	-	314830	314780	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-43-1	NZ_KI929393.1	-	315348	315298	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-36-1	NZ_KI965925.1	-	314934	314884	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-37-1	NZ_KI929290.1	+	231685	231735	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-233-1	NZ_KK020603.1	+	185410	185460	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-222-1	NZ_KK019419.1	+	227930	227980	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-231-1	NZ_KK081667.1	+	228093	228143	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-20-1	NZ_KI965795.1	-	315927	315877	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-29-1	NZ_KK073793.1	-	297930	297880	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-32-1	NC_019955.1	+	286013	286063	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-229-1	NZ_AXNL01000094.1	+	4296	4346	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-46-1	NZ_JALL01000115.1	-	98380	98330	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-157-1	NZ_AWJJ01000001.1	-	5723	5673	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vro-1-1	NZ_BBLC01000048.1	+	223563	223613	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-79-1	NZ_AWMJ01000046.1	+	14638	14688	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-80-1	NZ_AWMI01000001.1	-	4354	4304	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-207-1	NZ_AWHL01000001.1	-	14454	14404	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-219-1	NZ_BAVJ01000011.1	+	245390	245440	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Val-2-2	NZ_JXIN01000014.1	-	106189	106139	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Val-2-3	NZ_JXIO01000014.1	-	106189	106139	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Val-2-4	NZ_JZWD01000003.1	-	319570	319520	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Val-2-5	NZ_LCSG01000007.1	+	32246	32296	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Val-2-6	NZ_LCUM01000005.1	+	16468	16518	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vdi-1-1	NZ_CCKK01000023.1	+	38258	38308	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Val-4-1	NZ_ACZB01000006.1	-	131835	131785	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Val-5-1	NZ_AMPD01000006.1	-	120699	120649	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-1-1	NZ_ANBX01000002.1	+	10986	11036	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-24-1	NZ_JPIL01000006.1	+	222387	222437	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Val-2-7	NZ_LFWH01000029.1	+	40818	40868	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-199-1	NZ_AWHT01000012.1	+	37150	37200	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Val-2-8	NZ_JOKY01000004.1	-	117745	117695	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-8-1	NC_013456.1	-	130415	130365	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Val-6-1	NC_022349.1	+	2643213	2643263	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Val-3-1	NZ_CH902591.1	+	483698	483748	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vha-9-1	NZ_BAOD01000009.1	+	112541	112591	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vha-9-2	NZ_AMCT01000001.1	+	10582	10632	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vha-10-1	NZ_CAUN01000001.1	+	221925	221975	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vow-5-1	NZ_JPRD01000041.1	+	10157	10207	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vha-7-1	NZ_AYKI01000011.1	-	258359	258309	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vha-6-1	NZ_AHHQ01000061.1	-	135341	135291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-9-1	NZ_JH976042.1	-	105560	105510	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vha-12-1	NZ_JH720475.1	+	252971	253021	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vha-4-1	NZ_AOMR01000019.1	+	237184	237234	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vow-1-1	NZ_BAOH01000058.1	+	10195	10245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vha-11-1	NZ_CAUO01000001.1	-	283952	283902	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-3-1	NC_022269.1	-	2006268	2006218	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vha-5-1	NC_009783.1	+	721255	721305	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vow-3-1	NZ_JPRC01000010.1	+	104312	104362	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vow-2-1	NZ_BBKN01000104.1	+	104573	104623	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vow-2-2	NZ_BBKO01000049.1	+	27652	27702	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vow-2-3	NZ_BBPJ01000004.1	+	221575	221625	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vow-2-4	NZ_BBLB01000056.1	-	63133	63083	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Vow-6-1	NZ_BAOE01000009.1	-	159659	159609	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vow-4-1	NZ_BANZ01000007.1	+	221354	221404	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vha-3-1	NZ_ACZC01000005.1	+	75147	75197	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-10-1	NZ_JH976131.1	-	290388	290338	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-627	CEUP01099403.1	+	1243	1293	RNA →
env-628	CEUY01075272.1	+	1198	1248	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-629	CEVA01026273.1	+	584	634	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-1-1	NZ_BBKU01000066.1	-	291589	291539	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-1-2	NZ_BBKX01000044.1	+	229368	229418	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-1-3	NZ_BBKG01000111.1	-	228720	228670	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-1-4	NZ_BBKW01000020.1	+	122219	122269	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-1-5	NZ_BBKV01000034.1	-	289838	289788	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-4-1	NZ_BAOF01000005.1	-	213680	213630	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-2-1	NZ_BANY01000042.1	-	156590	156540	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-5-1	NZ_AGIE01000044.1	+	24998	25048	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-1-6	NZ_JPTJ01000344.1	-	60557	60507	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-1-7	NZ_JPTF01000271.1	+	6528	6578	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-1-8	NZ_JPTG01000526.1	-	34186	34136	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-4-2	NZ_AMDG01000002.1	+	21188	21238	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vha-8-1	NZ_DS179523.1	-	1250	1200	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vha-2-1	NZ_DF967934.1	+	223234	223284	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-1-9	NZ_JPTH01000426.1	+	2525	2575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vca-1-10	NZ_JSFE01000004.1	+	218917	218967	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-2-1	NZ_ABGR01000076.1	+	1750	1800	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-44-1	NZ_AJZF01000019.1	+	83395	83443	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-39-1	NZ_AJZG01000004.1	+	88039	88087	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-42-1	NZ_AJZI01000104.1	+	130365	130413	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-37-1	NZ_AJZJ01000171.1	-	55509	55461	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-36-1	NZ_AIDS01000064.1	+	80876	80924	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-41-1	NZ_AJZH01000106.1	-	157442	157394	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-34-1	NZ_AAMR01000027.1	-	57919	57871	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-33-1	NZ_AJZK01000123.1	-	5581	5533	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcy-2-1	NZ_AIDB01000019.1	-	153914	153866	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcy-5-1	NZ_AICZ01000040.1	+	82209	82257	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcy-15-1	NZ_AIDQ01000003.1	-	64827	64779	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-45-1	NZ_AJZE01000045.1	-	868	820	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcy-13-1	NZ_AIDN01000109.1	-	154821	154773	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcy-18-1	NZ_JH636802.1	-	154566	154518	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-5-1	NZ_LAUM01000025.1	-	7503	7455	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcr-1-1	NZ_CCKB01000054.1	-	64767	64719	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcr-1-2	NZ_CCKC01000053.1	-	64768	64720	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcr-1-3	NZ_CCJW01000071.1	-	64767	64719	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcr-1-4	NZ_CCKE01000137.1	-	64767	64719	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcr-1-5	NZ_CCKD01000003.1	+	80738	80786	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcr-1-6	NZ_CCJU01000033.1	-	64791	64743	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcr-2-1	NZ_AJYY01000105.1	-	64875	64827	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vba-1-1	NZ_AAZW01000016.1	+	72717	72765	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-21-1	NZ_CCKL01000023.1	-	71200	71152	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-16-1	NZ_CCKH01000049.1	-	65057	65009	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-11-1	NZ_CCJZ01000014.1	+	80837	80885	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcr-3-1	NZ_AJYZ01000064.1	+	82711	82759	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vcr-4-1	NZ_AJZA01000103.1	+	8727	8775	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Vcr-5-1	NZ_AJZB01000073.1	-	64832	64784	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcr-6-1	NZ_AJZC01000134.1	-	154849	154801	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-17-1	NZ_LK934107.1	-	64903	64855	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-13-1	NZ_LK934399.1	-	64965	64917	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-12-1	NZ_LK933700.1	+	80899	80947	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-20-1	NZ_LK933651.1	+	80775	80823	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-19-1	NZ_LK933553.1	+	81252	81300	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-18-1	NZ_LK933855.1	-	65082	65034	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-14-1	NZ_LK934544.1	+	80994	81042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-15-1	NZ_LK934195.1	-	52838	52790	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-630	CEUP01012127.1	-	372	324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-631	CEUY01376693.1	+	406	454	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-632	CEVA01031311.1	+	1334	1382	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-40-1	NZ_AFWG01000002.1	+	80636	80684	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-35-1	NZ_AJZD01000142.1	-	7513	7465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vka-1-1	NZ_AJYX01000051.1	-	64615	64567	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-633	JGI24025J20009_10090133	-	649	601	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-4-1	NZ_LAUL01000014.1	-	65430	65382	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-11-1	NZ_AIDM01000034.1	+	88163	88211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-14-1	NZ_AIDP01000054.1	-	71422	71374	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-19-1	NZ_AIDK01000001.1	-	102003	101955	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-4-1	NZ_AIDD01000066.1	+	8925	8973	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-20-1	NZ_AIDL01000041.1	+	19770	19818	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-17-1	NZ_AIDI01000041.1	+	52335	52383	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-8-1	NZ_AIDG01000061.1	-	154606	154558	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-10-1	NZ_AIDH01000094.1	-	1744	1696	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-1-1	NZ_AHTI01000209.1	+	27717	27765	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-3-1	NZ_AIDC01000227.1	+	87986	88034	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vle-1-1	NZ_LFQI01000004.1	+	80855	80903	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-7-1	NZ_JH636741.1	+	180960	181008	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-16-1	NZ_JH636876.1	+	82223	82271	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-12-1	NZ_JH636836.1	+	88238	88286	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-9-1	NZ_JH636656.1	-	256575	256527	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vcy-6-1	NZ_JH636615.1	-	154644	154596	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-31-1	NZ_CVNE01000009.1	+	88422	88470	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-634	AYRE01002890.1	+	135	183	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-635	AYRF01043169.1	+	149	197	RNA →
Vsp-38-1	NZ_AJZL01000194.1	+	19737	19785	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Afi-2-1	NZ_LCYF01000005.1	+	152582	152635	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vfi-1-1	NC_006840.2	-	2555303	2555250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vfi-2-1	NC_011184.1	-	2565485	2565432	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vfi-3-1	NZ_CM001400.1	-	2527750	2527697	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Afi-3-1	NZ_AJYI01000167.1	+	62506	62559	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vor-1-1	NZ_AJYV01000135.1	+	15084	15133	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Malic_M (smart00919)SfcA (COG0281) →
Vor-4-1	NZ_AJYT01000033.1	-	45641	45592	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vor-5-1	NZ_AJYU01000056.1	+	119483	119532	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Malic_M (smart00919)SfcA (COG0281) →
Vge-5-1	NZ_AJYW01000134.1	-	56037	55990	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vca-7-1	NZ_AEIU01000066.1	-	8794	8742	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vne-1-1	NZ_JXXU01000034.1	+	24784	24834	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vco-3-1	NZ_AEQS01000202.1	-	30435	30385	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-3-1	NZ_JPQB01000026.1	-	151183	151133	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-636	JQGR01000570.1	-	2317	2267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-637	ASRM01000514.1	+	1915	1965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-638	ASRP01020733.1	-	74	24	RNA → hypo →
env-639	AYRF01005860.1	-	150	100	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Vmi-5-1	NZ_ADAJ01000008.1	+	2127116	2127169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-25-1	NZ_ACZT01000021.1	+	188396	188449	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-3-1	NZ_ACFTQ01000008.1	-	82042	81989	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-115-1	NC_017270.1	+	2678381	2678434	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → hypo → hypo →
Vmi-1-1	NZ_AWWL01000147.1	+	15291	15344	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vmi-2-1	NZ_AOM01000029.1	-	84099	84046	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-7-1	NZ_AAUT01000067.1	-	679	626	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo →
Vch-196-1	NZ_JRXX01000170.1	+	166028	166081	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-185-1	NZ_ADAI01000043.1	-	82275	82222	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Vch-37-1	NZ_ADAL01000222.1	-	11533	11480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Vch-114-1	NZ_ADAK01000050.1	+	83945	83998	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Vch-35-1	NZ_ANNM01000107.1	+	15189	15242	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-32-1	NZ_AMWU01000165.1	-	24184	24131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-33-1	NZ_AMWV01000181.1	-	24184	24131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-34-1	NZ_AMWR01000112.1	-	24184	24131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-36-1	NZ_AMWW01000167.1	-	24184	24131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-30-1	NZ_AMWS01000172.1	-	24184	24131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-29-1	NZ_AMWF01000174.1	-	24184	24131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-31-1	NZ_AMWT01000032.1	-	24184	24131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-184-1	NZ_AWWF01000005.1	-	80007	79954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-183-1	NZ_AWWE01000005.1	-	80008	79955	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-182-1	NZ_AWWD01000005.1	-	80007	79954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-54-1	NZ_AXDR01000012.1	+	65426	65479	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-126-1	NZ_AYNN01000014.1	+	166095	166148	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-129-1	NZ_AYNM01000035.1	-	37698	37645	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-130-1	NZ_AYNL01000117.1	-	37688	37635	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-125-1	NZ_AYOM01000167.1	+	140313	140366	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Val-1-1	NZ_JADA01000005.1	-	80513	80460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-14-1	NZ_ACIA01000006.1	-	83502	83449	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-111-1	NZ_AFOR01000017.1	+	23142	23195	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) →
Vch-47-1	NZ_ALDL01000016.1	+	169034	169087	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-108-1	NZ_ALED01000028.1	+	174043	174096	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) →
Vch-39-1	NZ_AKGH01000001.1	+	2527089	2527142	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-1-1	NZ_ACVW01000009.1	-	64807	64754	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Vch-51-1	NZ_AGUN01000136.1	+	166224	166277	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-65-1	NZ_ALDQ01000022.1	+	171464	171517	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-63-1	NZ_ALDP01000017.1	+	170302	170355	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) →
Vch-16-1	NZ_ALDA01000016.1	+	167150	167203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-133-1	NZ_AHFX01000066.1	+	166303	166356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-12-1	NZ_ACHZ01000015.1	+	166071	166124	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →

Vch-62-1	NZ_AGUQ01000019.1	+	167891	167944	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-20-1	NZ_ALDC01000014.1	+	167366	167419	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-22-1	NZ_ALDE01000023.1	+	167278	167331	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-23-1	NZ_ALDF01000013.1	+	167122	167175	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-70-1	NZ_AFOM01000019.1	+	168579	168632	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-110-1	NZ_AFOQ01000010.1	+	171737	171790	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-27-1	NZ_ALDJ01000015.1	+	169778	169831	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-86-1	NZ_AJRU01000023.1	+	172852	172905	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-50-1	NZ_AGUM01000012.1	+	169488	169541	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-106-1	NZ_ALEC01000008.1	+	171021	171074	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-25-1	NZ_ALDH01000025.1	+	168608	168661	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-103-1	NZ_AFOO01000020.1	+	167567	167620	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-85-1	NZ_AGUS01000011.1	+	167472	167525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-6-1	NZ_JNEW01000014.1	+	97535	97588	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-17-1	NZ_AJRL01000032.1	+	166987	167040	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-11-1	NZ_JHXR01000011.1	-	80293	80240	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-42-1	NZ_AGUI01000126.1	+	166151	166204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-134-1	NZ_AHFY01000032.1	-	1904	1851	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-195-1	NZ_ATEV02000004.1	+	164199	164252	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-138-1	NZ_AHGC01000053.1	+	4310	4363	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-152-1	NZ_AHGP01000035.1	-	1904	1851	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-192-1	NZ_AMBS01000018.1	-	80028	79975	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-197-1	NZ_ACHV01000001.1	+	1368480	1368533	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-194-1	NZ_AMBT01000021.1	+	166169	166222	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-158-1	NZ_AHGG01000033.1	+	166151	166204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-157-1	NZ_AFSV01000006.1	+	72274	72327	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-148-1	NZ_AH GK01000006.1	+	166158	166211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-181-1	NZ_AIJR01000043.1	+	141625	141678	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-137-1	NZ_AHGB01000061.1	-	80003	79950	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-141-1	NZ_AELI01000040.1	-	1908	1855	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-188-1	NZ_ACHW01000024.1	+	173500	173553	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-150-1	NZ_AHGM01000040.1	-	1911	1858	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-149-1	NZ_AHGL01000070.1	+	166303	166356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-142-1	NZ_AHGD01000007.1	-	1904	1851	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-147-1	NZ_AHGJ01000008.1	-	1906	1853	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-193-1	NZ_AMBR01000002.1	+	166162	166215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-146-1	NZ_AHGH01000007.1	-	1908	1855	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-151-1	NZ_AHGN01000009.1	-	1903	1850	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-144-1	NZ_AHGF01000007.1	-	1906	1853	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-136-1	NZ_AHGA01000061.1	+	166303	166356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-145-1	NZ_AHGG01000060.1	+	88775	88828	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-135-1	NZ_AHFZ01000034.1	-	1919	1866	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-143-1	NZ_AHGE01000007.1	+	166319	166372	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Vch-140-1	NZ_AELJ01000042.1	-	1903	1850	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vmi-6-1	NZ_ACYV01000004.1	-	168966	168913	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Vmi-3-1	NZ_ADADF01000001.1	-	86644	86591	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Vmi-7-1	NZ_ACYU01000088.1	-	21850	21797	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Vch-128-1	NC_002505.1	+	2847750	2847803	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-121-1	NZ_DS178186.1	+	88174	88227	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-10-1	NZ_DS265229.1	+	74064	74117	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-179-1	NC_012582.1	+	2933043	2933096	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-101-1	NZ_AGVC02000009.1	+	168641	168694	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-8-1	NZ_AMVL01000016.1	+	167875	167928	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-187-1	NZ_ACHX01000008.1	+	168810	168863	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-189-1	NZ_ACHY01000014.1	+	164082	164135	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-186-1	NZ_GG774560.1	+	167617	167670	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
Vch-117-1	NZ_GG774581.1	-	79982	79929	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-119-1	NZ_DS990139.1	+	166078	166131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Vmi-4-1	NZ_GL989611.1	-	83946	83893	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-56-1	NZ_GL989441.1	+	140393	140446	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-68-1	NZ_GL988459.1	+	96678	96731	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-104-1	NZ_GL988785.1	+	94619	94672	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) →
Vch-13-1	NZ_GL989317.1	+	88093	88146	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-112-1	NZ_GL988901.1	+	166145	166198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-94-1	NZ_GL988622.1	+	166218	166271	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-45-1	NZ_JH377912.1	+	166228	166281	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-52-1	NZ_JH377642.1	+	166224	166277	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-49-1	NZ_JH377763.1	+	166391	166444	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-48-1	NZ_JH377867.1	+	166149	166202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-53-1	NZ_JH377415.1	+	166220	166273	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-69-1	NZ_JH377599.1	+	96678	96731	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-15-1	NZ_JH724675.1	+	166163	166216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-79-1	NZ_JH724533.1	+	166212	166265	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-67-1	NZ_JH724981.1	+	166199	166252	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-61-1	NZ_JH724365.1	+	166237	166290	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-81-1	NZ_JH724637.1	+	166235	166288	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-26-1	NZ_JH724792.1	+	166090	166143	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →

Vch-57-1	NZ_JH942113.1	+	166129	166182	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-102-1	NZ_JH941267.1	+	166210	166263	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-64-1	NZ_JH973832.1	+	15199	15252	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) →
Vch-28-1	NZ_JH941761.1	+	166181	166234	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-21-1	NZ_JH942554.1	+	166156	166209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-76-1	NZ_JH973997.1	+	64867	64920	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-75-1	NZ_JH942782.1	+	64906	64959	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-73-1	NZ_JH941360.1	+	64867	64920	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-105-1	NZ_JH941443.1	+	164229	164282	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-80-1	NZ_JH941836.1	+	64865	64918	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-59-1	NZ_JH941105.1	+	166233	166286	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-41-1	NZ_JH973434.1	+	64873	64926	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-74-1	NZ_JH942250.1	+	64867	64920	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-78-1	NZ_JH942415.1	+	64859	64912	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-19-1	NZ_JH942327.1	+	97406	97459	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-77-1	NZ_JH967247.1	+	64887	64940	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-93-1	NZ_JH974133.1	+	166143	166196	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-18-1	NZ_JH966256.1	+	131489	131542	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) →
Vch-71-1	NZ_JH941925.1	+	64869	64922	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-24-1	NZ_JH942693.1	+	166218	166271	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-83-1	NZ_JH973563.1	+	64871	64924	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-72-1	NZ_JH967136.1	+	26466	26519	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-82-1	NZ_JH967405.1	+	64871	64924	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-55-1	NZ_JH973724.1	+	166137	166190	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-88-1	NZ_JH976196.1	+	166222	166275	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-60-1	NZ_JH966759.1	+	15217	15270	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) →
Vch-107-1	NZ_JH967832.1	+	39583	39636	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-109-1	NZ_JH967937.1	+	39583	39636	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-87-1	NZ_JH967583.1	+	166149	166202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-44-1	NZ_JH974086.1	+	166208	166261	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-84-1	NZ_JH967537.1	+	64883	64936	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-97-1	NZ_JH967742.1	+	166214	166267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →

Vch-91-1	NZ_KB454392.1	+	166145	166198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-100-1	NZ_KB453749.1	+	166261	166314	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-89-1	NZ_KB454200.1	+	166220	166273	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-96-1	NZ_KB453977.1	+	96717	96770	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-90-1	NZ_KB454302.1	+	166149	166202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-95-1	NZ_KB454023.1	+	166216	166269	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-92-1	NZ_KB454115.1	+	166145	166198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-98-1	NZ_KB453880.1	+	64873	64926	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-153-1	NZ_KB661509.1	+	164143	164196	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) →
Vch-171-1	NZ_KB662560.1	+	166228	166281	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-38-1	NZ_KI530559.1	+	166138	166191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-177-1	NZ_KK037977.1	+	166271	166324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-163-1	NZ_KB663382.1	+	166153	166206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-160-1	NZ_KB661766.1	+	166232	166285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-165-1	NZ_KB662943.1	+	166233	166286	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-155-1	NZ_KB662662.1	+	166230	166283	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-173-1	NZ_KB661868.1	+	284370	284423	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-162-1	NZ_KB661631.1	+	166230	166283	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-167-1	NZ_KB662883.1	+	166226	166279	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-161-1	NZ_KB663436.1	+	166222	166275	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-164-1	NZ_KB663305.1	+	166229	166282	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-156-1	NZ_KB663101.1	+	166157	166210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-172-1	NZ_KB662607.1	+	166153	166206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-132-1	NZ_KB661281.1	+	68216	68269	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-176-1	NZ_KB662149.1	+	166222	166275	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-131-1	NZ_KB661126.1	+	166230	166283	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-178-1	NZ_KB661943.1	+	258269	258322	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-168-1	NZ_KB662761.1	+	176840	176893	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-174-1	NZ_KB662328.1	+	166153	166206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-166-1	NZ_KB663195.1	+	166153	166206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-169-1	NZ_KB662391.1	+	166157	166210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-175-1	NZ_KB661618.1	+	166149	166202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →

Vch-159-1	NZ_KB663522.1	+	166151	166204	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → RpmE (COG0254) rpmE (PRK00019) → hypo → Malic_M (smart00919) SfcA (COG0281) →
Vch-154-1	NZ_KB662046.1	+	97478	97531	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → RpmE (COG0254) rpmE (PRK00019) → hypo → Malic_M (smart00919) SfcA (COG0281) →
Vch-116-1	NC_012578.1	+	2784875	2784928	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919) SfcA (COG0281) →
Vch-179-2	NC_009457.1	+	2401623	2401676	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919) SfcA (COG0281) →
Vch-118-1	NC_012668.1	-	746911	746858	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-40-1	NZ_GL989090.1	+	64879	64932	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → RpmE (COG0254) rpmE (PRK00019) → hypo → Malic_M (smart00919) SfcA (COG0281) →
Vch-139-1	NC_016445.1	+	2317908	2317961	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919) SfcA (COG0281) →
Vch-190-1	NZ_KQ257374.1	-	83622	83569	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-1	NZ_LGNW01000019.1	-	80238	80185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-2	NZ_LGNN01000069.1	+	166375	166428	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-3	NZ_LGNQ01000044.1	+	166376	166429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-4	NZ_LGOB01000007.1	+	166374	166427	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-5	NZ_LGOJ01000066.1	+	166366	166419	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-6	NZ_LGOT01000059.1	+	166378	166431	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-7	NZ_LGNZ01000002.1	-	80248	80195	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-8	NZ_LGON01000072.1	-	80254	80201	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-9	NZ_LGOM01000082.1	+	166376	166429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-10	NZ_LGNI01000064.1	+	166378	166431	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-11	NZ_LGNL01000021.1	+	166350	166403	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-12	NZ_LGNO01000044.1	+	166376	166429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-13	NZ_LGOG01000113.1	-	80230	80177	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-14	NZ_LGOH01000029.1	+	166376	166429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-15	NZ_LGOP01000049.1	-	80210	80157	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-16	NZ_LGOS01000062.1	-	80228	80175	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-17	NZ_LGOE01000049.1	+	166376	166429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-18	NZ_LGOK01000130.1	+	166173	166226	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-19	NZ_LGNG01000064.1	-	80274	80221	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-20	NZ_LGNK01000118.1	+	166342	166395	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-21	NZ_LGNM01000071.1	+	166376	166429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-22	NZ_LGNU01000074.1	-	80274	80221	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-23	NZ_LGNS01000082.1	-	80264	80211	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-24	NZ_LGNR01000046.1	-	37719	37666	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-25	NZ_LGOO01000098.1	-	80234	80181	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-26	NZ_LGNV01000021.1	+	166350	166403	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-99-1	NZ_LAGVA02000012.1	+	168790	168843	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919) SfcA (COG0281) →
Vch-180-1	NZ_LANHS01000115.1	-	37694	37641	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-27	NZ_LGNX01000040.1	-	80274	80221	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-28	NZ_LGNY01000087.1	-	80232	80179	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-29	NZ_LGOL01000001.1	+	166376	166429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-30	NZ_LGOQ01000030.1	-	80264	80211	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-31	NZ_LGOR01000066.1	+	166378	166431	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-32	NZ_LGNH01000051.1	-	80268	80215	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-33	NZ_LGNJ01000075.1	+	166368	166421	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-34	NZ_LGNP01000076.1	+	166335	166388	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-35	NZ_LGNT01000064.1	-	80274	80221	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-36	NZ_LGOA01000065.1	-	80266	80213	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-37	NZ_LGOD01000058.1	+	166368	166421	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-38	NZ_LGOF01000063.1	-	80252	80199	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-39	NZ_LGOI01000018.1	-	80230	80177	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vch-123-40	NZ_LGOU01000021.1	-	80264	80211	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Vch-122-1	NZ_DS177959.1	+	45142	45195	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-43-1	NZ_JH966648.1	+	166215	166268	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-120-1	NZ_AP014524.1	+	2708026	2708079	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-2-1	NZ_CP007634.1	+	2318308	2318361	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-124-1	NZ_CP009042.1	+	2932367	2932420	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-2-2	NZ_CP010811.1	-	245075	245022	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-2-3	NZ_CP010812.1	-	232393	232340	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-4-1	NZ_KQ410628.1	-	89751	89698	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-191-1	NZ_KQ410502.1	-	81251	81198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-9-1	NZ_KQ410586.1	+	511976	512029	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-2-4	NZ_CP007653.1	+	2824210	2824263	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-170-1	NZ_CM001785.1	-	1052063	1052010	RNA → RpmE (COG0254)rpmE (PRK00019) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-58-1	NZ_GL988242.1	+	96693	96746	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-113-1	NC_016944.1	+	2894052	2894105	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-5-1	NZ_AJFN02000034.1	-	37684	37631	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-123-41	NZ_LGOC01000036.1	+	166343	166396	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-127-1	NZ_JDVX01000004.1	+	166061	166114	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vch-46-1	NZ_AJRO01000013.1	+	65177	65230	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) → hypo → Malic_M (smart00919)SfcA (COG0281) →
Vch-66-1	NZ_AJSL01000015.1	+	15488	15541	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RpmE (COG0254)rpmE (PRK00019) →
Fba-1-1	NC_014541.1	-	3979465	3979416	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsi-2-1	NZ_AEVT01000072.1	-	1849	1800	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Val-2-9	NZ_LFWL01000062.1	+	184291	184340	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vor-7-1	NZ_ACZV01000005.1	+	2348491	2348540	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vor-8-1	NZ_AFWH01000025.1	-	8828	8779	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vdi-2-1	NZ_BBJY01000009.1	-	86132	86083	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-640	CEGC01006263.1	-	190	141	RNA →
Vsp-32-1	NZ_JTLH01000041.1	+	156463	156512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Van-2-1	NC_015633.1	-	544299	544250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Lan-1-1	NC_022223.1	-	544215	544166	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Van-3-1	NZ_AEZA01000180.1	+	175711	175760	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Van-4-1	NZ_AEZB01000141.1	+	8300	8349	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Vor-2-1	NZ_AEZO01000054.1	-	18796	18747	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Van-1-1	NZ_LK021130.1	+	2795609	2795658	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vor-3-1	NZ_AJYR01000120.1	-	13360	13311	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vor-6-1	NZ_AJYS01000220.1	+	119473	119522	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → Malic_M (smart00919)SfcA (COG0281) → Malic_M (smart00919)SfcA (COG0281) →
Vge-3-1	NZ_AJYO01000176.1	+	32585	32634	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vge-1-1	NZ_AJYN01000189.1	+	32671	32720	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vge-4-1	NZ_AJYQ01000004.1	-	155012	154963	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vge-2-1	NZ_AJYP01000253.1	-	8489	8440	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-9-1	NZ_CAOC01000112.1	+	87830	87879	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vme-2-1	NZ_JYJP01000116.1	-	87552	87503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsi-1-1	NZ_JXB01000020.1	+	64370	64420	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-8-1	NZ_DS999347.1	+	49201	49251	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsi-1-2	NZ_JRWP01000001.1	-	9440	9390	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vca-6-1	NZ_JRWR01000026.1	-	9377	9327	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Vsi-1-3	NZ_JWLV01000015.1	+	63119	63169	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsi-1-4	NZ_JWLU01000041.1	-	9417	9367	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vva-1-1	NZ_JRWM01000039.1	+	63092	63142	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vne-2-1	NZ_LHPJ01000014.1	-	9210	9160	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vga-1-1	NZ_JXXV01000019.1	-	9082	9031	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vbr-1-1	NZ_AEVS01000038.1	+	4830	4881	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-1-1	NZ_JONH01000021.1	+	58049	58100	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-30-1	NZ_LBLS01000010.1	-	9548	9497	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vtu-2-2	NZ_AFWI01000035.1	-	9169	9118	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vtu-2-1	NZ_CP009354.1	+	3076212	3076263	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vtu-3-1	NZ_AHHF01000012.1	-	9134	9083	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vtu-1-1	NZ_LRWQ01000006.1	-	11627	11576	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vhe-1-1	NZ_LHPJ01000017.1	+	58937	58988	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-641	2231812703	-	323	274	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vfu-3-1	NZ_JTLJ01000033.1	+	28258	28307	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vfi-1-1	NZ_JXXQ01000009.1	-	5247	5198	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vfi-5-1	NZ_ASXS01000007.1	-	93784	93735	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vfi-3-1	NZ_JQHW01000024.1	-	1142	1093	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vfi-2-1	NZ_JQHX01000023.1	-	82414	82365	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vfi-4-1	NZ_ASXT01000003.1	+	178429	178478	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vfu-2-1	NC_016602.1	-	611055	611006	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vfu-1-1	NZ_ACZP01000018.1	-	103722	103673	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-26-1	NZ_ADBD01000005.1	+	179408	179459	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vre-1-1	NZ_JTKI01000012.1	+	137514	137562	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vre-1-2	NZ_JTKH01000005.1	+	9661	9709	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsc-1-1	NZ_AFWE01000063.1	-	23847	23799	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-23-1	NZ_AFWD01000056.1	+	110632	110680	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vic-1-1	NZ_AFWF01000319.1	-	14236	14188	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Awo-1-1	NZ_LN554846.1	+	373049	373100	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Asa-11-1	NC_011312.1	+	2970876	2970927	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Alo-1-1	NZ_AJYJ01000097.1	+	40923	40974	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Alo-2-1	NZ_ASAH01000010.1	+	62670	62721	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-642	CEPX01402402.1	+	28	76	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vta-2-1	NZ_AJZM01000039.1	+	89281	89329	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-22-1	NZ_CH902613.1	+	16168	16216	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-643	CEUP01013542.1	+	1403	1451	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-644	CEUY01108946.1	-	745	697	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-645	CEVA01131518.1	-	743	695	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vfo-1-1	NZ_JFFR01000005.1	+	71657	71705	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vta-3-1	NZ_AJZO01000189.1	-	107060	107012	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vta-1-1	NZ_AJZN01000372.1	-	1937	1889	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-43-1	NC_011753.2	-	3051148	3051100	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-646	CEUP01002391.1	+	3518	3569	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsh-2-1	NZ_ABCH01000012.1	-	28236	28185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsh-1-1	NZ_ASHJ01000339.1	+	4607	4658	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vsp-7-1	NZ_JPJA01000096.1	-	67831	67780	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vma-1-1	NZ_BBMR01000011.1	+	93746	93798	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vma-1-2	NZ_BBMT01000020.1	+	8867	8919	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vme-1-1	NZ_ACZO01000005.1	-	90681	90631	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ymo-1-1	NZ_CQDS01000022.1	+	45976	46030	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ymo-1-2	NZ_CPYJ01000009.1	+	45908	45962	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Ymo-1-3	NZ_CQBM01000006.1	-	164691	164637	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ymo-1-4	NZ_CTIO01000059.1	-	9110	9056	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ymo-1-5	NZ_CTKJ01000023.1	+	45799	45853	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ymo-1-6	NZ_CTRC01000025.1	+	46524	46578	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ymo-2-1	NZ_AALD02000032.1	-	9725	9671	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ymo-1-7	NZ_CTEP01000029.1	+	23903	23957	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ybe-1-1	NZ_CQBU01000019.1	-	10230	10176	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ybe-2-1	NZ_AALC02000088.1	+	2405	2459	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yma-2-1	NZ_HE997650.1	+	43162	43216	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-1	NZ_CHEEN01000012.1	-	112641	112587	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-2	NZ_CTJA01000014.1	+	44765	44819	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yma-1-1	NZ_CQBH01000009.1	+	43447	43501	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-3	NZ_CPZP01000012.1	-	112412	112358	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-4	NZ_CTKH01000009.1	+	42513	42567	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-5	NZ_CPY01000014.1	-	33557	33503	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-6	NZ_CPVN01000012.1	+	100741	100795	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-1-1	NZ_CQAZ01000031.1	+	21873	21927	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-1-2	NZ_CWJL01000021.1	+	57627	57681	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-7	NZ_CQDT01000005.1	-	35538	35484	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-8	NZ_CPWN01000012.1	-	35062	35008	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-9	NZ_CQBR01000013.1	-	34560	34506	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-10	NZ_CQBF01000012.1	+	107426	107480	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-11	NZ_CQEC01000013.1	+	114411	114465	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-12	NZ_CQEP01000014.1	-	25751	25697	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-13	NZ_CQBO01000025.1	+	44190	44244	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-2-2	NZ_AALE02000018.1	+	75774	75828	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-2-1	NZ_KN150731.1	+	3005078	3005132	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-14	NZ_CQBG01000011.1	-	36689	36635	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-15	NZ_CQBX01000015.1	+	103415	103469	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-16	NZ_CQDU01000015.1	+	94102	94156	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yfr-1-17	NZ_CQBW01000011.1	-	34252	34198	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Epi-1-1	NZ_BAYT01000033.1	+	32851	32903	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eta-6-1	NC_013508.1	-	3620131	3620079	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eta-7-1	NC_017309.1	-	3544275	3544223	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eta-5-1	NC_020796.1	-	3687618	3687566	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Epi-1-2	NZ_BAYU01000006.1	+	32953	33005	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ean-3-1	NZ_CP006664.1	-	1629414	1629362	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-56-1	NZ_CP011364.1	+	751576	751628	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ean-1-1	NZ_JABY01000008.1	+	32857	32909	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ean-4-1	NZ_JACP01000017.1	+	32830	32882	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ean-2-1	NZ_JABS01000011.1	-	207016	206964	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eic-2-1	NC_012779.2	+	3684424	3684476	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eic-1-1	NZ_AFJ01000056.1	-	19577	19525	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eta-2-1	NZ_AFJG01000032.1	+	21708	21760	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eho-5-1	NZ_BAUC01000010.1	-	117607	117555	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eta-4-1	NZ_GG739637.1	-	235527	235475	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eta-1-1	NZ_CP011359.1	+	64883	64935	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eta-3-1	NZ_AFJJ01000018.1	+	109310	109362	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eta-8-1	NZ_BANW01000013.1	-	156383	156331	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yal-1-1	NZ_CQEH01000017.1	-	39180	39127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yal-1-2	NZ_CQEJ01000021.1	-	38832	38779	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Yal-1-3	NZ_CQCP01000020.1	+	47144	47197	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yal-4-1	NZ_ACCB01000047.1	-	1909	1856	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-14-1	NC_008800.1	+	120155	120208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-1-1	NZ_CP009846.1	+	4065802	4065855	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yal-1-4	NZ_CQAX01000010.1	+	122176	122229	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-21-1	NZ_ASHT01000043.1	-	36650	36597	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-22-1	NZ_ASHU01000055.1	-	36354	36301	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-19-1	NZ_ASHV01000059.1	-	36237	36184	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-20-1	NZ_ASHW01000053.1	-	36469	36416	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-11-1	NZ_CAOV01000011.1	+	83723	83776	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-17-1	NZ_AGQO01000036.1	-	35756	35703	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-5-1	NZ_CACU01000005.1	+	132412	132465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-15-1	NZ_AKKR01000116.1	-	27907	27854	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-7-1	NZ_CACW01000016.1	-	5952	5899	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-6-1	NZ_CACV01000011.1	-	200350	200297	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-16-1	NC_015224.1	+	131163	131216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-18-1	NC_017564.1	-	2886749	2886696	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-1-2	NZ_CP009367.1	-	3690254	3690201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-1-3	NZ_CP009838.1	+	2005651	2005704	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-9-1	NZ_HF933424.1	+	128752	128805	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-4-1	NZ_HF933423.1	+	127495	127548	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-2-1	NZ_HF933426.1	-	4598604	4598551	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-8-1	NZ_HF933425.1	+	157671	157724	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-10-1	NZ_HF933206.1	+	132388	132441	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-127-1	NZ_ADPS010000326.1	+	13715	13768	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-132-1	NZ_ABCD01000004.1	+	834679	834732	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-76-1	NZ_AOSA01000185.1	+	13890	13943	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-77-1	NZ_AOMY01000087.1	-	7151	7098	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-227-1	NZ_AAYS01000001.1	-	719404	719351	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-221-1	NZ_AAYT01000010.1	+	29809	29862	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-224-1	NZ_ABAT01000037.1	-	8040	7987	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-228-1	NZ_ACNS01000001.1	+	2230658	2230711	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-225-1	NZ_AAOS02000002.1	-	191563	191510	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-226-1	NZ_ACNR01000002.1	+	105009	105062	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-73-1	NZ_ADSB01001145.1	-	769	716	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-114-1	NZ_JYJW01000062.1	+	13935	13988	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-114-2	NZ_JYJX01000087.1	+	13930	13983	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-115-1	NZ_LBFJ01000039.1	+	79507	79560	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-218-1	NZ_AAYU01000010.1	-	36730	36677	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-219-1	NZ_ADRZ01000574.1	-	769	716	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-219-2	NZ_AAYV01000014.1	-	8610	8557	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-105-1	NZ_AGJZ01000163.1	-	7134	7081	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-106-1	NZ_AGKA01000038.1	-	7176	7123	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-109-1	NZ_AGJV01000211.1	+	12389	12442	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-104-1	NZ_AGJU01000166.1	-	7123	7070	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-108-1	NZ_AGJY01000045.1	-	7176	7123	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-107-1	NZ_AGJT01000136.1	-	7132	7079	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-110-1	NZ_AGJS01000160.1	-	7177	7124	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-111-1	NZ_AGJW01000073.1	-	7101	7048	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-112-1	NZ_AGJX01000102.1	-	7175	7122	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ype-174-1	NZ_AKRZ01000067.1	+	10124	10177	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Ype-117-1	NZ_ADOY01000335.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-170-1	NZ_AKRW01000074.1	+	8810	8863	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-9-1	NZ_ADOW01000210.1	-	335	282	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-175-1	NZ_AKSA01000062.1	+	12442	12495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-179-1	NZ_AKSE01000056.1	+	8851	8904	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-14-1	NZ_ADPD01000556.1	+	10503	10556	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-189-1	NZ_AKSO01000061.1	+	8798	8851	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-123-1	NZ_ADPI01000278.1	+	13715	13768	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-194-1	NZ_AKST01000031.1	+	8772	8825	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-20-1	NZ_ADPM01000236.1	-	7093	7040	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-201-1	NZ_AKTA01000022.1	+	12445	12498	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-207-1	NZ_AKTG01000058.1	+	8844	8897	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-42-1	NZ_AKQL01000708.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-208-1	NZ_AKTH01000039.1	+	12442	12495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-214-1	NZ_AKTN01000075.1	+	5074	5127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-166-1	NZ_AKTO01000032.1	+	8856	8909	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-53-1	NZ_ADRA01001343.1	+	9993	10046	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-183-1	NZ_AKSI01000056.1	+	8820	8873	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-159-1	NZ_AKRP01000066.1	+	8787	8840	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-185-1	NZ_AKSK01000024.1	+	8853	8906	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-188-1	NZ_AKSN01000036.1	+	8837	8890	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-15-1	NZ_ADPE01000834.1	+	5067	5120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-211-1	NZ_AKTK01000059.1	+	8826	8879	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-169-1	NZ_AKTR01000071.1	+	8836	8889	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-21-1	NZ_ADPO01001311.1	+	5067	5120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-215-1	NZ_ACNT01000002.1	+	99358	99411	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-176-1	NZ_AKSB01000035.1	+	8780	8833	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-172-1	NZ_AKRX01000066.1	+	8773	8826	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-162-1	NZ_AKRS01000057.1	+	8792	8845	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-180-1	NZ_AKSF01000045.1	+	12446	12499	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-164-1	NZ_AKRU01000036.1	+	5005	5058	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-190-1	NZ_AKSP01000050.1	+	9378	9431	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-165-1	NZ_AKRV01000028.1	+	12442	12495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-191-1	NZ_AKSQ01000022.1	+	9219	9272	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-156-1	NZ_AKRM01000069.1	+	12432	12485	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-195-1	NZ_AKSU01000058.1	+	8770	8823	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-197-1	NZ_AKSW01000057.1	+	12440	12493	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-4-1	NZ_ADOV01000797.1	+	10642	10695	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-202-1	NZ_AKTB01000030.1	+	6451	6504	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-203-1	NZ_AKTC01000019.1	+	8778	8831	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-11-1	NZ_ADOX01001006.1	+	623	676	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-209-1	NZ_AKTI01000030.1	+	12442	12495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-168-1	NZ_AKTQ01000048.1	+	8785	8838	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-122-1	NZ_ADPG01000719.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-186-1	NZ_AKSL01000056.1	+	12446	12499	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-124-1	NZ_ADPL01000265.1	+	62	115	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-196-1	NZ_AKSV01000044.1	+	8842	8895	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-23-1	NZ_ADPQ01000548.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-173-1	NZ_AKRY01000059.1	+	8848	8901	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-178-1	NZ_AKSD01000032.1	+	8843	8896	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-128-1	NZ_ADPU01000583.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-187-1	NZ_AKSM01000049.1	+	12444	12497	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Ype-193-1	NZ_AKSS01000018.1	+	9267	9320	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-130-1	NZ_ADQA01000477.1	-	412	359	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-199-1	NZ_AKSY01000055.1	+	12442	12495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-160-1	NZ_AKRQ01000033.1	+	12432	12485	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-206-1	NZ_AKTF01000032.1	+	12436	12489	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-163-1	NZ_AKRT01000060.1	+	8826	8879	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-213-1	NZ_AKTM01000034.1	+	12438	12491	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-151-1	NZ_AMQL01000001.1	+	119897	119950	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-182-1	NZ_AKSH01000070.1	+	8780	8833	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-158-1	NZ_AKRO01000081.1	+	6527	6580	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-204-1	NZ_AKTD01000072.1	+	8776	8829	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-118-1	NZ_AKVQ01000089.1	-	7230	7177	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-210-1	NZ_AKTJ01000027.1	+	8752	8805	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-120-1	NZ_ADPA01000150.1	+	13715	13768	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-167-1	NZ_AKTP01000020.1	+	8836	8889	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-16-1	NZ_ADPF01000098.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-177-1	NZ_AKSC01000026.1	+	8781	8834	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-181-1	NZ_AKSG01000061.1	+	12440	12493	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-184-1	NZ_AKSJ01000016.1	+	12444	12497	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-134-1	NZ_ADQT01000515.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-192-1	NZ_AKSR01000032.1	+	6522	6575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-198-1	NZ_AKSX01000076.1	+	8836	8889	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-40-1	NZ_ADQI01001024.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-205-1	NZ_AKTE01000056.1	+	8828	8881	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-161-1	NZ_AKRR01000069.1	+	8837	8890	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-38-1	NZ_ADQG01000238.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-212-1	NZ_AKTL01000068.1	+	8860	8913	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-171-1	NZ_AKTS01000032.1	+	8838	8891	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-200-1	NZ_AKSZ01000056.1	+	6521	6574	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-72-1	NZ_ADSA02000142.1	-	7075	7022	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-28-1	NZ_ADPW01000087.1	+	10482	10535	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-131-1	NZ_ADQB01000681.1	+	13715	13768	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-57-1	NZ_ADRG01000150.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-63-1	NZ_ADRQ01000346.1	-	543	490	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-67-1	NZ_ADRU01000229.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-148-1	NZ_ADSF01000103.1	+	13920	13973	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-80-1	NZ_ADSK01000857.1	+	5067	5120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-126-1	NZ_ADPR01000439.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-27-1	NZ_ADPV01000112.1	-	335	282	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-136-1	NZ_ADQZ01000375.1	-	480	427	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-70-1	NZ_ADRY01000109.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-47-1	NZ_ADQR01000100.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-135-1	NZ_ADQX01000781.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-140-1	NZ_ADRM01000463.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-97-1	NZ_ADTB01000365.1	+	5079	5132	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-26-1	NZ_ADPT01000656.1	+	5077	5130	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-35-1	NZ_ADQD01000442.1	+	13715	13768	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-137-1	NZ_ADRD01000263.1	+	13715	13768	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-61-1	NZ_ADRN01000955.1	+	10028	10081	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-91-1	NZ_ADSX01000354.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-46-1	NZ_ADQQ01000130.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-60-1	NZ_ADRL01000403.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Ype-62-1	NZ_ADRP01000734.1	-	325	272	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-103-1	NZ_ADTI01001185.1	+	9163	9216	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-68-1	NZ_ADRV01000666.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-154-1	NZ_ADSU01000714.1	+	13716	13769	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-41-1	NZ_ADQK01000507.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-49-1	NZ_ADQU01000137.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-139-1	NZ_ADRJ01000349.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-75-1	NZ_ADSD01001379.1	+	9545	9598	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-92-1	NZ_ADSY01001236.1	+	8207	8260	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-133-1	NZ_ADQN01000513.1	+	13920	13973	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-44-1	NZ_ADQO01000836.1	-	7070	7017	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-58-1	NZ_ADRI01000395.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-65-1	NZ_ADRS01001043.1	+	9838	9891	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-87-1	NZ_ADSS01000896.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-98-1	NZ_ADTC01000594.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-129-1	NZ_ADPX01000345.1	+	13715	13768	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-119-1	NZ_ADOZ01000454.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-18-1	NZ_ADPJ01000086.1	-	335	282	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-51-1	NZ_ADQW01000954.1	+	5067	5120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-54-1	NZ_ADRB0100030.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-34-1	NZ_ADQC01000685.1	+	5067	5120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-43-1	NZ_ADQM01000370.1	-	781	728	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-55-1	NZ_ADRC01000710.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-138-1	NZ_ADRH01000811.1	+	12403	12456	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-48-1	NZ_ADSH01000710.1	+	13920	13973	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-64-1	NZ_ADRR01001210.1	+	62	115	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-145-1	NZ_ADRW01000267.1	+	12028	12081	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-89-1	NZ_ADSV01001085.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-149-1	NZ_ADSG01000304.1	-	752	699	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-81-1	NZ_ADSL01000341.1	+	62	115	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-220-1	NZ_AAYR01000027.1	-	8565	8512	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yps-15-1	NZ_BAUR01000075.1	+	71087	71140	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-146-1	NZ_AAUB01000173.1	+	6501	6554	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-69-1	NZ_ADRX01000324.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-74-1	NZ_ADSC01000669.1	+	4245	4298	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-78-1	NZ_ADSH01000912.1	+	9300	9353	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-82-1	NZ_ADSM01000470.1	+	5067	5120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-147-1	NZ_ADSE01000689.1	+	13920	13973	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-71-1	NZ_ATW01000295.1	-	2939	2886	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-88-1	NZ_ADST01000002.1	+	13725	13778	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-100-1	NZ_ADTE01000181.1	+	9873	9926	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-93-1	NZ_ADSZ01000320.1	+	10485	10538	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-142-1	NC_003143.1	+	119914	119967	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yps-14-1	NC_009708.1	+	124888	124941	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-94-2	NC_009381.1	-	4365187	4365134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yps-11-2	NC_010634.1	+	110418	110471	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-86-1	NZ_ADSQ01000035.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-101-1	NZ_ADTG01000548.1	-	751	698	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-19-1	NZ_ADPK01000243.1	+	5067	5120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-22-1	NZ_ADPP01000198.1	+	13715	13768	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-30-1	NZ_ADPY01001373.1	+	13715	13768	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-52-1	NZ_ADQY01000753.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Ype-83-1	NZ_ADSN01000864.1	+	5067	5120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-90-1	NZ_ADSW01000343.1	+	62	115	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-102-1	NZ_ADTH01000245.1	+	6953	7006	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-121-1	NZ_ADPC01000333.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-125-1	NZ_ADPN01000484.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-59-1	NZ_ADRK01001149.1	-	549	496	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-85-1	NZ_AYLR01001051.1	+	5067	5120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-33-1	NZ_ADPZ01000150.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-37-1	NZ_ADQF01000591.1	-	769	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-56-1	NZ_ADRE01000062.1	+	12515	12568	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-141-1	NZ_ADRO01000211.1	+	13735	13788	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-66-1	NZ_ADRT01000420.1	-	7070	7017	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-79-1	NZ_ADSJ01000717.1	+	5067	5120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-84-1	NZ_ADSO01000781.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-216-1	NZ_ADTF01000446.1	+	12403	12456	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yps-10-2	NC_006155.1	+	115862	115915	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-153-1	NC_004088.1	+	319573	319626	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-7-1	NZ_AYLS01000023.1	+	99382	99435	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-10-1	NZ_AYLR01000006.1	-	2608204	2608151	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yps-12-2	NC_010465.1	-	4530451	4530398	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-31-2	NC_010159.1	-	4044329	4044276	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo → RAYT (COG1943) → RAYT (COG1943) →
Ype-217-1	NC_014029.1	+	118900	118953	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-29-2	NC_017168.1	-	985179	985126	rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-5-1	NZ_CP006783.1	+	3932284	3932337	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-13-1	NZ_CP006754.1	-	1018418	1018365	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-6-1	NZ_CP006762.1	-	1856755	1856702	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-8-1	NZ_CP006758.1	-	626171	626118	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-3-1	NZ_CP006794.1	-	1252367	1252314	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-12-1	NZ_CP006792.1	-	3098142	3098089	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-24-1	NZ_CP006806.1	+	163420	163473	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-17-1	NZ_CP006751.1	-	1158455	1158402	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-25-1	NZ_CP006748.1	+	3470401	3470454	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-152-1	NZ_ADSR01000499.1	+	13715	13768	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-45-1	NZ_ADQP01000988.1	+	4329	4382	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-150-1	NZ_ADSI01000634.1	-	798	745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-39-1	NZ_ADQH01001213.1	+	5067	5120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-96-1	NZ_ADTA01000354.1	+	9546	9599	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-50-1	NZ_ADQV01000561.1	+	5067	5120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-155-1	NC_008149.1	-	4294903	4294850	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-32-2	NC_008150.1	+	302083	302136	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-143-1	NC_017154.1	+	118900	118953	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-144-1	NC_017160.1	+	118961	119014	rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-2-1	NZ_CP009492.1	+	2504726	2504779	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yps-11-1	NZ_CP009780.1	+	4050379	4050432	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-2-2	NZ_CP009844.1	-	4507031	4506978	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-32-1	NZ_CP009906.1	+	3397336	3397389	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-31-1	NZ_CP009935.1	-	536663	536610	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo → RAYT (COG1943) →
Yps-13-1	NZ_CP010067.1	+	4077636	4077689	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ype-2-3	NZ_CP010293.1	+	484831	484884	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Yps-1-1	NZ_CP009757.1	+	3889992	3890045	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Ype-2-4	NZ_CP009704.1	+	3323809	3323862	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Yps-10-1	NZ_CP009712.1	-	2780604	2780551	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-2-5	NZ_CP009785.1	-	886875	886822	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-113-1	NZ_CP010023.1	+	4500934	4500987	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-2-6	NZ_CP009723.1	-	3814528	3814475	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Yps-1-2	NZ_CP009786.1	+	4234015	4234068	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-2-7	NZ_CP009991.1	-	1952990	1952937	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Yps-12-1	NZ_CP009792.1	-	490330	490277	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-29-1	NZ_CP009840.1	+	2556450	2556503	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-2-8	NZ_CP009996.1	-	323257	323204	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-95-1	NZ_CP010247.1	-	579933	579880	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-94-1	NZ_CP009715.1	+	758495	758548	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-222-1	NC_017265.1	+	253058	253111	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-223-1	NC_005810.1	+	120657	120710	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-2-9	NZ_CP009836.1	-	1128920	1128867	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-36-1	NZ_ADQE01000355.1	+	62	115	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-99-1	NZ_ADTD01000838.1	-	769	716	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Yps-9-1	NZ_CBKR010000111.1	-	7080	7027	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Yps-8-1	NZ_CBKS010000081.1	+	71103	71156	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-116-1	NZ_AXDG01000093.1	+	12398	12451	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ype-157-1	NZ_AKRN01000061.1	+	12430	12483	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Yal-2-1	NZ_CP009781.1	-	2568066	2568013	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ynu-1-1	NZ_CPYD01000015.1	+	93996	94049	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Yru-1-1	NZ_CP009539.1	-	2020716	2020663	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dze-2-1	NZ_APMV01000013.1	+	179089	179142	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dsp-1-1	NZ_JSYG01000017.1	+	181093	181146	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Ssp-23-1	NZ_AWXH01000002.1	-	14589	14536	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
env-647	HBC_scaff_10311262	-	789	736	RNA	→	hypo	→	
env-648	HBC_scaff_10330317	+	27	80	RNA	→	metL (PRK09466)	Homoserine_dh (pfam00742)	→
env-649	HBC_ctgs_1043907	-	789	736	RNA	→	hypo	→	
env-650	HBC_ctgs_1006921	+	27	80	RNA	→	metL (PRK09466)	Homoserine_dh (pfam00742)	→
Lqu-1-1	NZ_JIBP01000021.1	+	129696	129749	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Lqu-1-2	NZ_JIBO01000012.1	-	15246	15193	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Lqu-1-3	NZ_JIBQ01000013.1	+	129634	129687	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dsp-2-1	NZ_JXBN01000033.1	+	48158	48211	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dch-1-1	NZ_JRWY01000048.1	+	61153	61206	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dsp-6-1	NZ_JXBO01000013.1	-	15193	15140	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dso-1-1	NZ_CP009460.1	+	3086245	3086298	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dsp-5-1	NZ_CM001979.1	+	218165	218218	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dsp-4-1	NZ_CM001984.1	+	228039	228092	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dze-7-1	NZ_APWM01000030.1	+	26292	26345	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dze-9-1	NZ_AJVN01000010.1	+	188349	188402	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dda-5-1	NC_013592.1	-	4501180	4501127	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dze-8-1	NZ_CM001858.1	-	4245021	4244968	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dze-5-1	NZ_CM001977.1	-	4240558	4240505	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dze-1-1	NZ_CM001972.1	-	4399809	4399756	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dze-6-1	NZ_CM001980.1	-	4317617	4317564	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dze-4-1	NZ_CM001985.1	-	4353927	4353874	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dze-3-1	NZ_CP006929.1	-	4276325	4276272	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dch-3-1	NZ_CM001974.1	+	156157	156210	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dch-2-1	NZ_CM001981.1	+	138095	138148	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Dda-1-1	NZ_CM001982.1	+	212261	212314	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→

Dda-3-1	NZ_CM001978.1	+	204493	204546	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dda-4-1	NC_014500.1	+	216804	216857	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dda-2-1	NZ_CM001976.1	+	246468	246521	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dch-1-2	NZ_JSYH01000045.1	+	149402	149455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dch-4-1	NZ_CM001904.1	+	133855	133908	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dsp-9-1	NZ_CM001975.1	+	190423	190476	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xdo-1-1	NZ_FO704550.1	+	206252	206305	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xpo-1-1	NZ_FO704551.1	-	3528869	3528816	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xbo-11-1	NC_013892.1	-	4104240	4104187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xbo-3-1	NZ_HG428366.1	-	23364	23311	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xbo-8-1	NZ_HG427595.1	+	21398	21451	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xbo-2-1	NZ_HG428558.1	+	25827	25880	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xbo-6-1	NZ_HG427126.1	-	7746	7693	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xbo-5-1	NZ_HG426603.1	-	23994	23941	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xbo-10-1	NZ_HG779933.1	-	23971	23918	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xbo-4-1	NZ_HG426761.1	-	24006	23953	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xbo-7-1	NZ_HG428161.1	-	23817	23764	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xbo-9-1	NZ_HG427430.1	+	93568	93621	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xbo-1-1	NZ_FO818637.1	-	4500575	4500522	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xsz-1-1	NZ_CBXF010000099.1	+	173156	173209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xca-1-1	NZ_CBXE010000012.1	-	24443	24390	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xkh-1-1	NZ_LFCV01000027.1	-	4729	4676	RNA → ←-hypo
Xsp-1-1	NZ_JTHK01000060.1	-	23322	23269	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xne-5-1	NZ_CCWM01000116.1	+	16700	16753	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xne-5-2	NZ_CCWM01000334.1	+	16700	16753	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xne-6-1	NZ_CCWW01000414.1	-	7580	7527	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xne-3-1	NC_014228.1	+	198616	198669	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xne-4-1	NZ_HF952048.1	+	184374	184427	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xne-2-1	NZ_LN681227.1	+	198617	198670	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xne-1-1	NZ_JRV01000010.1	-	42870	42817	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Plu-5-1	NZ_JQOC01000024.1	-	35411	35358	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Plu-9-1	NZ_JXSK01000009.1	-	70770	70717	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Plu-7-1	NZ_AZAB02000203.1	-	35364	35311	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Plu-8-1	NZ_JTHJ02000138.1	+	22410	22463	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Plu-5-2	NZ_JXUR02000066.1	+	22410	22463	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Plu-6-1	NZ_JFGV01000042.1	-	14184	14131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pte-4-1	NZ_CP011104.1	-	1726439	1726386	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pte-6-1	NZ_AUXQ01000046.1	+	22142	22195	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pte-5-1	NZ_AXDT01000086.1	+	18583	18636	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pte-3-1	NZ_JGVH01000076.1	-	10895	10842	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Plu-10-1	NC_005126.1	-	5539908	5539855	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pte-2-1	NZ_LAYSJ01000007.1	+	43299	43352	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-15-1	NZ_AYKS02000100.1	-	30017	29965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-2-1	NZ_JRMH01000002.1	-	333539	333487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-1-1	NZ_JSXC01000044.1	-	17660	17608	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ddi-5-1	NZ_CM001841.1	+	187089	187141	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ddi-3-1	NZ_CM001838.1	+	162116	162168	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ddi-4-1	NZ_CM001840.1	+	170048	170100	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dsp-7-1	NZ_CM001973.1	+	162116	162168	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ddi-1-1	NZ_CM002023.1	+	192156	192208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ddi-2-1	NZ_KQ046817.1	-	4180925	4180873	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-13-1	NZ_JQEI01000010.1	+	16683	16735	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Ssp-14-1	NZ_LQJEJ01000064.1	+	16684	16736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dpa-1-1	NZ_CM001857.1	-	4364511	4364459	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfo-1-1	NZ_CP011254.1	-	1590388	1590336	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfo-2-1	NZ_AVAH01000002.1	-	32669	32617	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfo-5-1	NZ_ASZB01000023.1	+	61525	61577	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfo-4-1	NZ_ASZA01000012.1	-	28374	28322	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfo-3-1	NZ_AUZV01000007.1	+	146615	146667	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-7-1	NZ_AODU01000021.1	-	23353	23301	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ppa-2-1	NZ_JENG01000020.1	+	33412	33464	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pwa-3-1	NC_013421.1	+	198446	198498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ppa-1-1	NZ_KN151108.1	-	181617	181565	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pat-3-1	NZ_KB933471.1	+	739413	739465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pat-4-1	NC_004547.2	-	4770742	4770690	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pat-2-1	NZ_CP007744.1	-	4721893	4721841	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pat-2-2	NZ_CP009125.1	-	4676226	4676174	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-55-1	NC_017845.1	+	210989	211041	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pwa-2-1	NZ_AKVS01000042.1	+	29133	29185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pwa-1-1	NZ_JQHP01000018.1	-	24420	24368	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pwa-1-2	NZ_JQOH01000017.1	+	30041	30093	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-8-1	NZ_JQOF01000004.1	+	276707	276759	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-8-2	NZ_JQOG01000006.1	-	24482	24430	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bgo-1-1	NZ_CGIG01000001.1	-	1386796	1386744	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bsp-1-1	NZ_CM001230.1	-	4603649	4603597	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dsp-3-1	NZ_CM001983.1	+	176356	176408	rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pbe-1-1	NZ_JQHM01000017.1	+	44048	44100	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pbe-1-2	NZ_JQHL01000014.1	-	18376	18324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-5-11	NZ_JUJI01000017.1	-	23832	23780	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ppo-1-1	NZ_JQHN01000020.1	+	52227	52279	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-651	JGI26054J46599_1244098	+	95	147	RNA → ←-hypo
env-652	SPBFG_contig14881	-	539	487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-27-1	NZ_ALOV01000001.1	+	94626	94678	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-23-1	NZ_AVSR01000009.1	-	25295	25243	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-20-1	NZ_JVCS01000035.1	-	25362	25310	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-1	NZ_JUSZ01000089.1	+	94274	94326	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-9-1	NZ_AYMO01000018.1	-	25741	25689	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-28-1	NC_020211.1	-	5122946	5122894	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-7-1	NZ_KK214336.1	+	24122	24174	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-5-1	NZ_KI929263.1	-	2697435	2697383	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-19-1	NZ_AP013063.1	+	4816609	4816661	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-18-1	NZ_LAYMT01000027.1	-	25712	25660	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-3-2	NZ_JTBR01000001.1	+	3163415	3163467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-653	AEQT01000902.1	-	25741	25689	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-654	APTF_contig00062	+	84678	84730	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sur-1-1	NZ_JSFB01000001.1	-	3972705	3972653	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-20-1	NZ_LDEG01000010.1	-	25885	25833	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-3-3	NZ_JVEJ01000246.1	-	25311	25259	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-12-1	NZ_JVEL01000457.1	-	8014	7962	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-21-1	NZ_JMPQ01000029.1	+	94339	94391	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sne-1-1	NZ_JPUX01000001.1	-	29493	29441	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-19-1	NZ_CP003424.1	-	4914868	4914816	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-16-1	NZ_CP005927.1	-	849700	849648	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sma-8-1	NZ_KK214298.1	-	25945	25893	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-6-1	NZ_KI929261.1	+	420108	420160	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-26-1	NZ_AORJ01000046.1	-	25636	25584	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-3-4	NZ_JTBU01000001.1	+	2106852	2106904	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-655	F76GVBA01EWCUB	+	406	458	RNA → hypo →
env-656	CLOF_contig22543	+	3049	3101	RNA →
Sma-20-2	NZ_LFJS01000008.1	-	181443	181391	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-2-1	NZ_JWAE01000021.1	-	25579	25527	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-2-2	NZ_JWBK01000133.1	+	17268	17320	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-2-3	NZ_JVWX01000015.1	-	25565	25513	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-22-1	NZ_HG326223.1	-	4286664	4286612	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spl-5-1	NZ_AJTB01000062.1	+	34460	34512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssy-1-1	NZ_CCES01000004.1	-	27914	27862	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssy-2-1	NZ_GL636109.1	-	16479	16427	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sgr-1-1	NZ_JGVP01000045.1	-	1623	1571	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sod-1-1	NZ_GG753567.1	-	1210885	1210833	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spl-1-1	NZ_ARWD01000001.1	-	5361904	5361852	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spl-2-1	NC_021591.1	-	5175142	5175090	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spl-6-1	NC_021659.1	-	5314607	5314555	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spl-3-1	NZ_AMSV01000076.1	-	19552	19500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spr-2-1	NC_009832.1	-	5307340	5307288	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-25-1	NZ_KB661120.1	-	5154241	5154189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-657	JGI24735J21928_10403343	-	113	61	RNA →
env-658	DPOL_contig07438	-	12704	12652	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-659	SWWA_contig25429	-	3135	3083	RNA → ← PRK05264 (PRK05264)MetJ (COG3060)
Sli-3-1	NC_021741.1	-	5069699	5069647	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sli-1-1	NZ_CP011303.1	+	5203476	5203528	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sli-2-1	NZ_DF820433.1	+	97289	97341	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-16-1	NZ_ATOH01000018.1	+	95385	95437	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-13-1	NZ_ATOK01000032.1	+	95385	95437	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-12-1	NZ_ATOL01000045.1	-	25725	25673	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-4-1	NZ_ATOM01000026.1	-	25727	25675	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-17-1	NZ_ATOG01000076.1	-	25572	25520	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-15-1	NZ_KE375711.1	+	95619	95671	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-14-1	NZ_KE375758.1	+	95401	95453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-21-1	NC_015566.1	-	5290302	5290250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-22-1	NC_017573.1	-	5289850	5289798	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Spl-4-1	NC_015567.1	-	5290173	5290121	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-24-1	NC_020064.1	-	4697421	4697369	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-3-1	NZ_CP011642.1	+	2708667	2708719	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-1	NZ_JPSO01000025.1	-	24470	24418	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-6-1	NZ_AODT01000022.1	-	23586	23534	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-5-1	NZ_JQHJ01000008.1	+	136473	136525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-5-2	NZ_JUJR01000004.1	-	26044	25992	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-5-3	NZ_JUJG01000011.1	-	26099	26047	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-5-4	NZ_JUJS01000003.1	-	792139	792087	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-10-1	NC_012917.1	+	199661	199713	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-2	NZ_JPSM01000001.1	-	24461	24409	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-3	NZ_JUJJ01000011.1	-	24104	24052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-5-5	NZ_JUJT01000020.1	-	24009	23957	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-4	NZ_JUJE01000005.1	-	28337	28285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-5	NZ_JUJL01000007.1	-	24410	24358	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Pca-12-1	NZ_ABVY01000037.1	-	14362	14310	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cmu-2-1	NZ_CP007044.2	+	1090545	1090597	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-5-6	NZ_JUJO01000019.1	-	24319	24267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-5-7	NZ_JUJQ01000006.1	-	26072	26020	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-5-8	NZ_JUJP01000007.1	-	25212	25160	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-5-9	NZ_JUJF01000020.1	-	24130	24078	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-6	NZ_JUJD01000003.1	-	24283	24231	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-7	NZ_JUJB01000021.1	-	24944	24892	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-5-10	NZ_JUJH01000022.1	-	26713	26661	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-8	NZ_JUJC01000010.1	-	23496	23444	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-9-1	NZ_ABVX01000016.1	-	18047	17995	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-9	NZ_JUJK01000006.1	-	1101	1049	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-10	NZ_JUJN01000013.1	-	25803	25751	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-11	NZ_JUJM01000006.1	-	23692	23640	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-12	NZ_LGRF01000008.1	+	135274	135326	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-4-1	NZ_ALIU01000001.1	-	18504	18452	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-11-1	NC_018525.1	-	4586906	4586854	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-13	NZ_JPSN01000031.1	-	107877	107825	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-14	NZ_JQOE01000006.1	+	275251	275303	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pca-3-15	NZ_JQOD01000007.1	-	18268	18216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-17-1	NZ_AYMN01000039.1	+	151302	151354	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-18-1	NZ_AYMQ01000065.1	+	114568	114620	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pas-2-1	NC_012962.1	-	4916832	4916778	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pas-1-1	NZ_JONO01000042.1	+	23154	23208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Xgr-1-1	NZ_LDNM01000030.1	-	22309	22254	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hpa-1-1	NZ_JWZ01000009.1	+	170462	170514	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hal-1-1	NZ_JTET01000010.1	-	22434	22382	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hal-1-2	NZ_JTEU02000022.1	+	113408	113460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hal-1-3	NZ_LAZF01000026.1	+	11854	11906	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hal-1-4	NZ_LAZG01000008.1	-	21781	21729	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hal-2-1	NZ_JMPK01000018.1	+	58626	58678	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-660	DPOL_F64H56M02IXVBN	+	28	80	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hpa-1-2	NZ_JWBZ01000059.1	-	434	382	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hal-4-1	NZ_JH417535.1	+	157332	157384	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eba-3-1	NZ_ADCU02000001.1	+	4449192	4449244	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hal-3-1	NZ_CP009706.1	+	299355	299407	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-661	SPBFG_contig15870	-	5793	5739	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
gpr-1-1	NZ_AMYV01000018.1	+	32852	32905	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-24-1	NZ_AJHJ01000020.1	+	52512	52565	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rch-1-1	NZ_JRWU01000009.1	-	26174	26121	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eam-2-1	NZ_JMPJ01000068.1	+	95292	95345	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-662	DPOF_contig09155	-	2266	2213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-663	DPOLF_contig09092	-	6580	6527	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-664	DPOL_contig00038	+	36878	36931	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-665	SPBFG_GA1E3IJ02I46OL	+	306	359	RNA →
env-666	FGTW_contig30418	-	31336	31283	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-667	FGTFG_contig02103	+	85330	85383	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-668	JGI25162J39368_1000075	-	25553	25500	RNA → ← hypō
env-669	JGI25163J39215_1000213	-	4721	4668	RNA → ← hypō
env-670	JGI25164J39214_1000053	-	25553	25500	RNA → ← hypō
env-671	SwRhRL2b_contig_56033	+	517	570	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Raq-3-1	NC_017047.1	-	4814745	4814692	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Rsp-4-1	NC_015061.1	-	4716764	4716711	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Rsp-3-1	NZ_JQJR01000015.1	-	25545	25492	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Raq-1-1	NZ_JUHL01000031.1	+	18582	18635	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Raq-1-2	NZ_JUHM01000047.1	-	5015	4962	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Raq-2-2	NC_016818.1	-	4714466	4714413	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Raq-2-1	NZ_JMPO01000146.1	+	95132	95185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-672	XylAfBL_contig05016	+	910	963	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-673	XAGC_contig03916	+	8510	8563	RNA → ←-hypo
env-674	XylAfBA_contig26731	+	2773	2826	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-1-1	NZ_LGYC01000001.1	-	31789	31738	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-1-2	NZ_JSWU01000006.1	+	171759	171810	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-3-1	NZ_AYMP01000005.1	-	32378	32327	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-2-1	NZ_CCFB01000001.1	+	198262	198313	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-1-3	NZ_LAGC01000010.1	-	143210	143159	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-1-4	NZ_JUYZ01000051.1	-	52099	52048	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-6-1	NC_020418.1	+	647912	647963	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-4-1	NZ_CBWE010000048.1	+	118052	118103	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Msp-5-1	NZ_AZRH01000004.1	-	103144	103093	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-5-1	NZ_AMWL02000012.1	-	105828	105777	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-1-5	NZ_JQGP01000003.1	-	77455	77404	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-1-6	NZ_JRKW01000009.1	+	165680	165731	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-1-8	NZ_JTBT01000001.1	+	1238015	1238066	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mmo-1-7	NZ_JUVX01000049.1	+	20761	20813	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Mwi-1-1	NZ_LD0F01000037.1	-	16081	16031	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Psn-1-1	NZ_CM001773.1	-	286368	286317	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pbu-1-1	NZ_KB233226.1	-	31250	31199	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pal-5-1	NZ_AZYZ01000023.1	+	170468	170519	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pal-3-1	NZ_JALA01000018.1	-	30690	30639	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pre-3-1	NZ_CM001774.1	+	548141	548192	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pre-1-1	NZ_CVLT01000011.1	+	8877	8928	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pre-1-2	NZ_JSEQ01000006.1	-	32695	32644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pre-2-1	NZ_GG705271.1	+	112866	112917	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pru-5-1	NZ_GG703823.1	-	35067	35016	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pal-8-1	NZ_ABXW01000070.1	-	30334	30283	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pal-9-1	NZ_KB233235.1	-	30888	30837	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pal-2-1	NZ_JACS01000017.1	-	31209	31158	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pal-4-1	NZ_JAKZ01000057.1	+	50253	50304	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pal-7-1	NZ_JALB01000006.1	-	30356	30305	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pal-6-1	NZ_JALC01000028.1	+	173522	173573	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Pal-1-1	NZ_JALD01000049.1	+	172466	172517	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eba-4-1	NZ_AMFN01000021.1	+	169629	169682	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Msp-4-1	NZ_JJMI01000052.1	+	104126	104179	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-675	HBC_scaff_10000440	+	5214	5266	RNA → ←-hypo
env-676	HBC_ctgs_1005247	+	2966	3018	RNA → ←-hypo
env-677	CLOF_contig24321	-	704	652	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-678	ACEF_contig00049	-	523	472	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Cmu-1-1	NZ_AJKU01000051.1	-	3469	3418	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Csa-13-1	NC_023032.1	+	149771	149822	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Csa-10-1	NZ_CALF01000071.1	+	4097945	4097996	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Csa-3-1	NZ_AWSP01000023.1	+	208400	208451	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Csa-11-1	NZ_CALE01000616.1	+	4090594	4090645	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo →
Csa-6-1	NZ_AJLB01000065.1	-	2039	1988	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Csa-4-1	NZ_AJLA01000020.1	-	36481	36430	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csa-2-1	NZ_AJKT01000018.1	+	66704	66755	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cdu-3-1	NZ_AJKY01000079.1	+	62855	62906	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cdu-1-1	NZ_AJKZ01000025.1	-	32358	32307	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cdu-2-1	NZ_AJXX01000093.1	-	35818	35767	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csa-8-1	NZ_AWFW01000041.1	-	32602	32551	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cdu-4-1	NZ_CAKV01000164.1	+	29188	29239	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ctu-3-1	NZ_CALB01000097.1	+	3916369	3916420	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csa-14-1	NZ_AFMO01000075.1	-	17965	17914	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cdu-5-1	NZ_CALA01000393.1	+	4235981	4236032	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cco-1-1	NZ_CAKW01000043.1	+	51829	51880	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ctu-4-1	NC_013282.2	+	183302	183353	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csa-16-1	NC_020260.1	-	3781421	3781370	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cun-1-1	NZ_AJKW01000018.1	-	32659	32608	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cun-1-2	NZ_CAKX01000221.1	+	3809092	3809143	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csa-7-1	NZ_BAWU01000020.1	+	2500	2551	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csa-5-1	NZ_AJLC01000180.1	+	62760	62811	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cma-2-1	NZ_JXTD01000005.1	+	64019	64070	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cma-3-1	NZ_AJKV01000030.1	+	59963	60014	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cma-1-1	NZ_JPZE01000012.1	+	76282	76333	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cma-1-2	NZ_JPZG01000177.1	-	6258	6207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cma-1-3	NZ_JPZH01000130.1	-	44040	43989	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cma-4-1	NZ_CALD01000014.1	+	4023113	4023164	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csa-9-1	NZ_CALG01000065.1	+	30206	30257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cma-1-4	NZ_JPZD01000152.1	+	5905	5956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cma-1-5	NZ_JPZF01000101.1	-	6338	6287	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cma-5-1	NZ_CALC01000087.1	-	3657473	3657422	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csa-12-1	NC_009778.1	-	3776784	3776733	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csa-15-1	NC_017933.1	-	4083623	4083572	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csa-1-1	NZ_CP011047.1	-	827969	827918	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-679	FGTW_contig20460	-	365	314	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Tod-1-1	NZ_JNGH01000037.1	-	69319	69268	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Tod-1-2	NZ_JNGI01000158.1	-	23681	23630	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-680	2227358547	+	86186	86237	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-681	TrFG_GO06Z1101E2O72	+	74	125	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-682	ACOFG987_contig24115	+	393	444	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-683	APTF_contig08800	+	1648	1699	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-684	ACOFG987_contig23961	-	394	343	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eba-5-1	NC_020063.1	-	4635348	4635297	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-685	FGTW_GHRKC7402FUCRI	-	60	9	RNA →
Tgu-1-1	NZ_JMTB01000106.1	+	15805	15856	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-686	JGI26055J44792_1031982	-	374	323	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-687	TrFG_contig00049	-	5566	5515	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-688	ACOFG987_contig40025	+	6347	6398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-689	ACOFG988_contig25298	-	1504	1453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-690	scaffold610_9_V1_UC-21	+	568	619	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-691	DOF008_scaffold12770_1	-	3518	3467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-692	PaFGMunAill.c011219	+	225	276	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-693	JGI26057J44791_1008390	-	1105	1054	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-694	APTF_contig04656	-	272	221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-695	ACEF_contig16949	+	52822	52873	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-696	ACOFG987_contig47692	+	281	332	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-697	ACOFG988_contig32966	+	7759	7810	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-698	CLOF_contig00503	+	11843	11894	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-699	AECF_contig10395	+	1675	1726	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-71-1	NZ.LEDV01000005.1	-	25147	25096	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eho-7-1	NZ.ANIA01000010.1	+	18731	18782	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-67-1	NZ.AMGJ01000018.1	+	18729	18780	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-9-1	NZ.CP008823.1	-	4756273	4756222	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-15-1	NZ.KK736253.1	-	4808834	4808783	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-61-1	NZ.KI535482.1	-	1900916	1900865	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-64-1	NZ.KI535506.1	-	4967519	4967468	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-65-1	NZ.KI535607.1	-	1051094	1051043	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-55-1	NZ.KI535567.1	-	2547796	2547745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-18-1	NZ.KI973154.1	+	546623	546674	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-4-1	NZ.KI973172.1	-	1856201	1856150	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-21-1	NZ.KI973143.1	-	25734	25683	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-22-1	NZ.KI973132.1	+	2398583	2398634	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-20-1	NZ.KI973336.1	-	25242	25191	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-31-1	NZ.KI973278.1	-	109546	109495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-3-1	NZ.KI973178.1	-	690446	690395	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-14-1	NZ.KI973197.1	-	1835108	1835057	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-32-1	NZ.KI973270.1	-	581090	581039	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-6-1	NZ.KI973186.1	-	3623723	3623672	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-27-1	NZ.KI973212.1	-	103050	102999	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-23-1	NZ.KI973128.1	-	95766	95715	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-21-1	NZ.KI973257.1	-	383611	383560	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-26-1	NZ.KI973320.1	-	27166	27115	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-24-1	NZ.KI973217.1	-	3681096	3681045	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eho-6-1	NZ.GL892086.1	-	148706	148655	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eho-2-1	NZ.CP010377.1	-	4491382	4491331	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eho-3-1	NZ.CP010384.1	-	4645020	4644969	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-4-1	NZ.KK736218.1	-	27669	27618	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-3-1	NZ.KN912611.1	-	181038	180987	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eho-4-1	NZ.CP010376.2	-	4745095	4745044	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-1-1	NZ.CP011584.1	-	3888938	3888887	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-1-2	NZ.CP011650.1	-	3861467	3861416	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-1-3	NZ.CP011572.1	+	2928705	2928756	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-1-4	NZ.CP011581.1	+	1042420	1042471	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-12-1	NZ.KQ089963.1	-	1910866	1910815	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-35-1	NZ.KQ089940.1	+	544460	544511	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-34-1	NZ.KQ089934.1	-	36906	36855	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-9-1	NZ.KQ089956.1	-	370660	370609	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-10-1	NZ.KQ089962.1	+	561134	561185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-18-1	NZ.KQ089922.1	+	443512	443563	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-37-1	NZ.KQ089949.1	+	3599004	3599055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-16-1	NZ.KQ089855.1	-	35241	35190	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-8-1	NZ.KQ090002.1	-	4088043	4087992	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-17-1	NZ.KQ089884.1	-	31776	31725	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-11-1	NZ.KQ089967.1	+	1947798	1947849	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-7-1	NZ.KQ089989.1	+	4391029	4391080	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-39-1	NZ.KQ089891.1	-	25347	25296	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eho-4-2	NZ.CP012167.1	-	4548238	4548187	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eho-3-2	NZ.CP012165.1	-	4790402	4790351	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Eho-8-1	NZ_ANID01000005.1	+	18734	18785	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-57-1	NZ_AXLK01000002.1	-	662290	662239	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eca-2-1	NZ_ANIC01000004.1	-	513413	513362	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-1-9	NZ_JTBO01000001.1	+	4527233	4527284	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-1-10	NZ_JTBN01000004.1	+	1394084	1394135	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-700	FGTW_contig23348	+	302	353	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-701	TrFG_GO06Z1101EGFU2	-	143	92	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-702	JGI26532J50257_10015026	+	2407	2458	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-703	JGI26540J51217_10040168	+	700	751	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-704	FGTW_contig31546	+	3921	3972	RNA →
env-705	FGTW_contig33102	+	679	730	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-19-1	NZ_JSZC01000008.1	+	81942	81993	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-31-1	NZ_JZZI01000030.1	+	11753	11804	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-29-1	NZ_LABD01000016.1	+	76834	76885	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-38-1	NZ_JZYC01000011.1	+	76772	76823	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-32-1	NZ_JZZF01000011.1	+	76674	76725	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-30-1	NZ_JZZX01000013.1	+	71383	71434	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-34-1	NZ_JZYX01000023.1	+	66329	66380	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-35-1	NZ_JZYR01000012.1	+	76673	76724	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-37-1	NZ_JZYJ01000013.1	-	34145	34094	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-41-1	NZ_JZKL01000011.1	+	77056	77107	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-46-1	NZ_LEET01000001.1	+	76857	76908	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-51-1	NZ_LECZ01000019.1	-	26537	26486	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-48-1	NZ_LEES01000015.1	-	26503	26452	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-50-1	NZ_LEDI01000013.1	-	8101	8050	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-43-1	NZ_LEEP01000004.1	-	34305	34254	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-52-5	NZ_LFDQ01000011.1	+	75190	75241	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lsp-1-1	NZ_LDUO01000006.1	+	85683	85734	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lad-1-1	NZ_LDWM01000006.1	+	85682	85733	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-28-1	NZ_JWGU01000218.1	+	34093	34144	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-28-2	NZ_JWGT01000199.1	+	34093	34144	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-28-3	NZ_JWAF01000124.1	-	26447	26396	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-28-4	NZ_JVMT01000150.1	-	26451	26400	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-28-5	NZ_JVND01000119.1	+	71438	71489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-40-1	NZ_JUMS01000116.1	-	34207	34156	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-28-6	NZ_JVWV01000106.1	+	11834	11885	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-1-11	NZ_JUOF01000010.1	+	42106	42157	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-57-1	NZ_ATHX01000018.1	+	76731	76782	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-1-1	NZ_JFHW01000016.1	-	26463	26412	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-14-1	NZ_JDWG01000020.1	-	34120	34069	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-73-1	NZ_ALNS01000021.1	-	26409	26358	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-53-1	NZ_JALR01000031.1	+	24192	24243	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-46-1	NZ_AZUB01000011.1	+	64891	64942	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-44-1	NZ_AZUA01000011.1	+	71526	71577	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eas-2-1	NZ_JACW01000036.1	-	26054	26003	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-45-1	NZ_AZXZ01000015.1	+	64891	64942	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-8-1	NZ_KK736240.1	-	3203895	3203844	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-16-1	NZ_KK736266.1	-	37488	37437	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-64-1	NZ_KI535616.1	-	2057472	2057421	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-62-1	NZ_KI535461.1	-	2643968	2643917	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-56-1	NZ_KI535548.1	-	1326474	1326423	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-58-1	NZ_KI535695.1	-	3774199	3774148	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Ecl-25-1	NZ_KI973093.1	-	738284	738233	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-24-1	NZ_KI973119.1	-	3729528	3729477	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eas-3-1	NZ_CP007546.1	+	4028910	4028961	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eas-1-1	NZ_CP011591.1	+	3197317	3197368	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-41-1	NZ_KQ087598.1	-	4674371	4674320	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-36-1	NZ_CP012162.1	-	4845841	4845790	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-13-1	NZ_JDWH01000014.1	-	34223	34172	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-50-1	NZ_JRJC01000045.1	+	72599	72650	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-69-1	NZ_JRUR01000040.1	+	75694	75745	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ksp-8-1	NZ_ALNJ01000088.1	-	7833	7782	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-52-1	NZ_LDCI01000017.1	-	26551	26500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-706	bisonPool14jan08_C4751	+	678	729	RNA →
env-707	bisonPool05dec07_BXBC29500_b1	+	542	593	RNA → ←-hypo
env-708	BISONP_C3973	-	751	700	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-709	DOM005_scaffold1784_4	-	8533	8482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eho-1-1	NZ_JZYQ01000016.1	-	26597	26546	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-33-1	NZ_JZZB01000010.1	+	86850	86901	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eho-1-2	NZ_JJZN01000011.1	-	26606	26555	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eho-1-3	NZ_JZYY01000014.1	+	86140	86191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eho-1-4	NZ_JZZQ01000016.1	+	86140	86191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eho-1-5	NZ_JZZO01000011.1	+	86145	86196	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eho-1-6	NZ_JZZT01000013.1	+	86145	86196	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-45-1	NZ_LEEJ01000002.1	+	80227	80278	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-47-1	NZ_LEDQ01000007.1	+	84661	84712	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eho-1-7	NZ_LEDF01000011.1	-	26773	26722	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eho-1-8	NZ_LEED01000021.1	-	26771	26720	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-66-1	NZ_AXLJ01000001.1	-	4555433	4555382	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-27-1	NZ_JVNW01000148.1	+	11730	11781	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lam-1-1	NZ_KK737778.1	-	749896	749845	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-65-1	NZ_KI535486.1	-	1069309	1069258	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-63-1	NZ_KI535633.1	-	97928	97877	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-63-1	NZ_KI535513.1	-	26618	26567	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-12-1	NZ_KI911561.1	-	3608360	3608309	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-26-1	NZ_KI973090.1	-	30534	30483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-22-1	NZ_KI973240.1	+	4664452	4664503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-15-1	NZ_KI973191.1	-	26615	26564	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-23-1	NZ_KI973229.1	+	3189653	3189704	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-33-1	NZ_KI973265.1	+	3567038	3567089	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-30-1	NZ_KI973283.1	+	3569631	3569682	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-1-5	NZ_CP009854.1	-	4534500	4534449	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-25-1	NZ_KI973322.1	+	86166	86217	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-5-1	NZ_KI973170.1	+	4660747	4660798	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-13-1	NZ_KK214763.1	+	100101	100152	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-10-1	NZ_CP008897.1	-	4541025	4540974	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-11-1	NZ_CP008905.1	-	4529003	4528952	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-36-1	NZ_KQ089941.1	+	4327417	4327468	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-38-1	NZ_KQ089925.1	+	1012995	1013046	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-710	BAAW01000972.1	-	3278	3227	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-15-1	NZ_JH603150.1	+	3606885	3606936	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kva-1-1	NZ_KK736636.1	+	72250	72301	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-711	ACOFG988_contig05406	+	809	860	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Emo-1-1	NZ_GL890783.1	+	74375	74426	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-712	ACOFG987_contig12924	+	6742	6793	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-713	TrFG_GO06Z1101DZBFU	-	245	194	RNA → ←-hypo
Eae-3-1	NC_015663.1	+	1578215	1578266	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kae-2-1	NZ_KK736189.1	-	26043	25992	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kae-8-1	NZ_KI973151.1	+	4566597	4566648	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kae-10-1	NZ_KI973115.1	+	4912164	4912215	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eae-2-1	NZ_KB911089.1	+	60962	61013	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kae-9-1	NZ_KI973149.1	-	26765	26714	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-39-1	NZ_JZYA01000020.1	+	70697	70748	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-40-1	NZ_JZXZ01000015.1	+	70697	70748	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-49-1	NZ_LEDN01000009.1	-	34047	33996	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eas-1-2	NZ_LEDN01000010.1	-	34185	34134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-714	JCVI_SCAF_1096628076268	+	1539	1590	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ksp-2-1	NZ_JAND01000018.1	-	27347	27296	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kox-18-1	NC_016612.1	+	1528968	1529019	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kox-17-1	NC_018106.1	+	102388	102439	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kox-9-1	NZ_CP008788.1	+	136463	136514	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kmi-3-1	NZ_CP004887.1	-	549059	549008	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kox-1-4	NZ_JTBQ01000003.1	+	1597391	1597442	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-1-6	NZ_CP009756.1	-	4713790	4713739	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-715	JGI26055J44792_1064861	-	162	111	RNA →
env-716	JGI26054J46599_1155624	+	96	147	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Lad-2-1	NZ_JMPM01000080.1	-	5520	5469	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-717	BAAW01000278.1	-	9404	9353	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-718	BAAX01012058.1	-	967	916	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-719	DLM016_C725662.1	-	371	320	RNA → ←-hypo
Ror-3-1	NZ_JNPD01000022.1	+	72914	72965	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ror-2-1	NZ_JNPC01000052.1	+	72989	73040	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ror-4-2	NC_021066.1	-	4009168	4009117	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kox-14-1	NZ_JH603146.1	+	5383932	5383983	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-720	BMHB3a_c17472	-	62	11	RNA →
env-721	JGI20225J20221_1000350	+	59385	59436	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-722	JGI20225J20221_1000514	-	18991	18940	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-723	JGI2065J20421_1001533	-	7784	7733	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-724	JGI26051J44788_1097127	-	262	211	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-725	JGI26052J44787_1053593	-	334	283	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-726	JGI26055J44792_1036479	-	374	323	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-727	JGI26054J46599_1011686	-	900	849	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-51-1	NZ_JTLF01000168.1	+	39738	39789	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Elu-1-1	NZ_JTLO01000001.1	-	3106148	3106097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-52-2	NZ_JZYG01000016.1	+	85427	85478	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eko-1-1	NZ_JZYS01000009.1	+	92343	92394	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eko-1-2	NZ_JZYH01000012.1	+	90533	90584	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eko-1-3	NZ_JZXR01000011.1	+	92366	92417	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-52-3	NZ_JZKU01000006.1	+	84152	84203	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-44-1	NZ_LDCK01000029.1	+	87672	87723	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eko-1-4	NZ_LDCJ01000023.1	-	26538	26487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eko-1-5	NZ_LDCL01000005.1	+	90555	90606	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-54-1	NZ_LEDRO1000013.1	-	26431	26380	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ecl-1-12	NZ_LEDX01000013.1	-	26457	26406	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eko-1-6	NZ_LEEC01000023.1	-	26443	26392	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eko-1-7	NZ_LECY01000021.1	+	96372	96423	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Esp-70-1	NZ.LEDW01000020.1	+	61773	61824	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Elu-1-2	NZ.LEEO01000026.1	-	26445	26394	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-52-4	NZ.LEDL01000002.1	-	34294	34243	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eko-1-8	NZ.LEDC01000018.1	+	92385	92436	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eko-1-9	NZ.LEEK01000034.1	+	75795	75846	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eko-1-10	NZ.LEEL01000010.1	-	26539	26488	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Elu-1-3	NZ.LEER01000024.1	+	44534	44585	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eko-1-11	NZ.LEEQ01000013.1	+	94220	94271	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Elu-1-4	NZ.JVAG01000129.1	-	26272	26221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-66-1	NZ.ATCK01000043.1	-	26572	26521	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-49-1	NZ.JALW01000032.1	-	34139	34088	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-68-1	NC.014121.1	-	5180845	5180794	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-17-1	NZ.CP006580.1	+	191531	191582	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Elu-1-5	NZ.LGIV01000009.1	-	26778	26727	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-5-1	NZ.KK736229.1	-	126143	126092	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-20-1	NZ.KK736277.1	-	26447	26396	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-59-1	NZ.KI535662.1	-	3665245	3665194	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-62-1	NZ.KI535636.1	-	2645376	2645325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-60-1	NZ.KI535658.1	-	31674	31623	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-6-1	NZ.KI973169.1	+	364492	364543	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-19-1	NZ.KI973153.1	+	4412446	4412497	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-28-1	NZ.KI973206.1	-	1100641	1100590	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-2-1	NZ.KI973182.1	-	3892522	3892471	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-58-1	NC.016514.1	-	4606548	4606497	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-69-1	NC.018405.1	-	4625000	4624949	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-1-7	NZ.CP009850.1	-	4664467	4664416	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-70-1	NC.018079.1	-	4844043	4843992	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-1-8	NZ.CP011798.1	-	327444	327393	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-728	ACEF_contig00957	-	2301	2250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-729	AECF_contig26314	-	81	30	RNA →
Kae-3-1	NZ.KK736200.1	+	3717888	3717939	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kae-1-1	NZ.CP011574.1	-	3117235	3117184	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-730	XAGC_contig23616	-	1010	959	RNA → ← hypō
Kmi-2-1	NZ.AYMI01000011.1	+	97857	97908	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-731	TrFG_contig00373	+	1944	1995	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eas-4-1	NC.015968.1	-	4661093	4661042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Lad-1-2	NZ.JWJV01000033.1	-	7978	7927	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-732	4491419.3.NODE_4719	-	473	422	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-733	4491419.3.NODE_11764	-	474	423	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-734	DLM028_scaffold4351.7	-	4065	4014	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-326-1	NZ.AQOC01000021.1	-	29376	29325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kqu-2-1	NZ.JVQN01000176.1	-	1038	987	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kqu-2-2	NZ.JVJE01000086.1	+	33812	33863	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kqu-2-3	NZ.JVVC01000018.1	-	26482	26431	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kqu-2-4	NZ.CBZR010000001.1	+	69045	69096	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-275-1	NZ.KI535595.1	+	3403936	3403987	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-237-1	NZ.AOGO01000011.1	+	69040	69091	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-735	TrFG_contig13861	-	281	230	RNA → ← hypō
Kva-2-1	NC.013850.1	-	5332563	5332512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-232-1	NC.011283.1	-	5516732	5516681	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kva-1-6	NZ.CP009274.1	+	1816499	1816550	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rte-1-1	NZ.LANE01000003.1	-	120401	120350	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eho-1-9	NZ_LBLX01000029.1	+	85605	85656	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-736	4491419.3_NODE12924	+	144	195	RNA →
env-737	4491488.3_NODE1236	+	328	379	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ksp-4-1	NZ_GG745516.1	-	26527	26476	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kva-1-2	NZ_KK737586.1	+	69197	69248	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kva-1-3	NZ_KK737692.1	+	69506	69557	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kva-1-4	NZ_KK737663.1	+	508763	508814	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-274-1	NZ_KI535605.1	+	1344252	1344303	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-280-1	NZ_KI535485.1	+	75229	75280	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-268-1	NZ_KI535672.1	+	4608393	4608444	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kva-1-5	NZ_KK036667.1	+	1372107	1372158	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ksp-6-1	NZ_KB976100.1	+	5373858	5373909	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kva-1-7	NZ_CP010523.1	+	3265862	3265913	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-8-1	NZ_JAKX01000043.1	+	84191	84242	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-12-1	NZ_JH603143.1	+	4820997	4821048	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-2-1	NZ_KQ235800.1	+	1506324	1506375	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-29-1	NZ_KI973298.1	+	90849	90900	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-2-1	NZ_KI973222.1	+	1710483	1710534	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ror-1-1	NZ_CP010557.1	+	596820	596871	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-738	TrFG_GO06Z1101DX8CW	+	410	461	RNA →
Ecl-42-1	NZ_JZKT01000038.1	-	26924	26873	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-7-1	NZ_KK736236.1	-	40059	40008	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-739	JCVL_SCAF_1101667396151	-	261	210	RNA → ←PriA (COG1198)PRK05580 (PRK05580)
Ror-4-1	NZ_CVRH01000021.1	-	26617	26566	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rpl-2-1	NZ_KMPP01000013.1	-	26477	26426	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rpl-1-3	NZ_JTBS01000001.1	+	1859515	1859566	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rpl-1-1	NZ_JUZO01000017.1	-	26397	26346	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rpl-1-2	NZ_JPRG01000005.1	-	29247	29196	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eca-3-1	NZ_GG704867.1	+	87486	87537	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kqu-1-1	NZ_KQ089430.1	+	80289	80340	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-67-1	NC_009436.1	-	4390991	4390940	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-740	BAAY01007565.1	+	809	860	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-741	NLM027_scaffold15214_2	-	8262	8211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kae-5-1	NZ_KK736212.1	+	4447956	4448007	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kae-4-1	NZ_KK736209.1	+	59203	59254	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kae-11-1	NZ_KI973112.1	-	26144	26093	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kae-6-1	NZ_KI973163.1	+	4470166	4470217	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kae-7-1	NZ_KI973160.1	-	439123	439072	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kae-13-1	NZ_KI973099.1	-	76517	76466	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kae-12-1	NZ_KI973103.1	+	5175205	5175256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eae-1-1	NC_020181.1	-	3840695	3840644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-742	JGI26053J44789_1079225	+	118	169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-743	scaffold31432_4_MH0008	-	1152	1101	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-744	scaffold66042_2_MH0028	+	325	376	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-745	DLF010_scaffold7891_17	-	257	206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-746	DLM010_scaffold43772_3	+	3869	3920	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-747	DLM013_scaffold3780_4	-	2536	2485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-748	DOM025_scaffold154_16	-	1239	1188	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-749	NLM006_scaffold9282_3	+	1048	1099	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-750	NOM005_scaffold41513_1	-	528	477	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-751	NOM020_scaffold17044_1	-	530	479	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-752	NOM026_scaffold17616_5	+	3875	3926	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-753	SRS017191_C1645600	-	298	247	RNA → ←-hypō
Kpn-336-1	NZ_AKAI01000019.1	+	69325	69376	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-339-1	NZ_AKAK01000019.1	+	69445	69496	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-344-1	NZ_AJZX01000018.1	+	69310	69361	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-342-1	NZ_AKAN01000030.1	-	30770	30719	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-337-1	NZ_AKAJ01000017.1	+	68885	68936	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-341-1	NZ_AKAM01000021.1	+	69493	69544	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-346-1	NZ_AJZZ01000020.1	-	30703	30652	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-130-1	NZ_JAPZ01000068.1	-	30404	30353	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-226-1	NZ_AFQL01000035.1	-	30305	30254	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-343-1	NZ_AJZW01000019.1	-	30594	30543	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-340-1	NZ_AKAL01000044.1	-	30767	30716	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-315-1	NZ_ANGI02000123.1	-	30404	30353	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-331-1	NZ_AKAD01000019.1	-	30622	30571	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-205-4	NZ_CDJH01000058.1	-	30308	30257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-200-1	NZ_JNBM01000001.1	+	71686	71737	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-300-1	NZ_ARRU01000117.1	-	30307	30256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-293-1	NZ_ARSM01000115.1	-	30314	30263	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-288-1	NZ_ARSK01000223.1	-	30308	30257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-204-1	NZ_JMSW01000001.1	+	3639812	3639863	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-203-1	NZ_JMSX01000001.1	+	3139354	3139405	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-3-1	NZ_JMMY01000001.1	+	1290527	1290578	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-10-1	NZ_AQQH01000032.1	-	30385	30334	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-128-1	NZ_LBLV01000039.1	+	64047	64098	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-166-1	NZ_LBID01000034.1	-	30659	30608	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-167-1	NZ_LBLU01000064.1	+	69284	69335	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-165-1	NZ_LBIE01000001.1	+	63787	63838	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-169-1	NZ_AOPN02000142.1	+	33886	33937	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-164-1	NZ_LBIK01000035.1	+	26789	26840	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-262-1	NZ_LAVN01000012.1	+	63706	63757	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-205-1	NZ_JVKF01000039.1	+	63885	63936	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-241-1	NZ_AXL01000003.1	+	4686167	4686218	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-240-1	NZ_AXLG01000003.1	+	4750718	4750769	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-242-1	NZ_AXLE01000001.1	+	4741668	4741719	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-209-1	NZ_AVFC01000077.1	+	69005	69056	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-205-2	NZ_JULI01000116.1	-	30352	30301	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-205-3	NZ_JULH01000061.1	-	30362	30311	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-3-2	NZ_ARSN01000079.1	-	30275	30224	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-264-1	NZ_AQQD01000294.1	+	65257	65308	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-233-1	NZ_APWF01000076.1	-	30307	30256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-294-1	NZ_ARSH01000011.1	-	30308	30257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-199-2	NZ_ARVN01000047.1	-	30307	30256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-236-1	NZ_APWJ01000011.1	+	22829	22880	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-319-1	NZ_APWA01000100.1	-	30308	30257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-295-1	NZ_APVU01000051.1	-	30307	30256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-308-1	NZ_ARSE01000152.1	-	30308	30257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-306-1	NZ_ARPP01000028.1	-	30307	30256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-235-1	NZ_APWI01000146.1	-	30307	30256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-321-1	NZ_APVZ01000120.1	-	30307	30256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-231-1	NZ_AVAN01000034.1	+	64640	64691	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-255-1	NZ_ARPO01000036.1	-	30308	30257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Kpn-298-1	NZ_APVT01000051.1	-	30307	30256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

Kpn-200-2	NZ_ARVM01000045.1	-	30308	30257	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-310-1	NZ_ARSL01000131.1	+	68924	68975	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-257-1	NZ_ARSB01000142.1	-	30314	30263	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-314-1	NZ_ARRY01000131.1	-	30308	30257	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-287-1	NZ_APVP01000044.1	-	30308	30257	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-299-1	NZ_APVR01000150.1	+	22831	22882	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-291-1	NZ_APVO01000145.1	-	30307	30256	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-305-1	NZ_ARRV01000085.1	-	30307	30256	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-292-1	NZ_ARSG01000160.1	-	30308	30257	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-296-1	NZ_AQQA01000109.1	-	30307	30256	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-127-1	NZ_AQQI01000044.1	-	30387	30336	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-357-1	NZ_ATEZ01000131.1	+	68945	68996	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-234-1	NZ_APWG01000108.1	-	30318	30267	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-230-1	NZ_ARSQ01000036.1	+	22838	22889	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-229-1	NZ_ARSP01000052.1	-	30307	30256	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-263-1	NZ_APWE01000184.1	-	30309	30258	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-228-1	NZ_ARSO01000057.1	-	30308	30257	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-290-1	NZ_ARSJ01000101.1	-	30307	30256	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-258-1	NZ_AFQK01000005.1	-	30326	30275	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-332-1	NZ_AKAE01000020.1	-	30565	30514	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-355-1	NZ_CANS01000126.1	+	69343	69394	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-328-1	NZ_AJJI01000017.1	+	68833	68884	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-194-1	NZ_JJNI01000022.1	+	60242	60293	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-190-1	NZ_JJNJ01000018.1	+	70166	70217	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-161-1	NZ_JJNK01000022.1	+	63710	63761	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-199-1	NZ_JMSY01000001.1	+	3417357	3417408	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-211-1	NZ_AYOV01000023.1	+	69005	69056	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-212-1	NZ_AYOW01000027.1	+	69005	69056	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-348-1	NZ_AKAB01000020.1	+	69393	69444	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-345-1	NZ_AJZY01000021.1	-	30650	30599	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-354-1	NZ_CANR01000136.1	+	69501	69552	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-350-1	NZ_AJVY01000169.1	+	64800	64851	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-347-1	NZ_AKAA01000020.1	-	30633	30582	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-356-1	NZ_CAJM02000254.1	+	69080	69131	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-353-1	NZ_ALIS01000023.1	-	30146	30095	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-289-1	NZ_APVV01000006.1	+	68928	68979	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-322-1	NZ_APWC01000036.1	+	68928	68979	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-323-1	NZ_APWD01000119.1	+	22834	22885	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-352-1	NZ_ATAK01000075.1	+	68887	68938	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-301-1	NZ_ARVQ01000045.1	+	68928	68979	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-318-1	NZ_APVY01000110.1	-	30307	30256	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-312-1	NZ_ARRX01000168.1	-	30308	30257	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-138-1	NZ_AYQE01000011.1	-	29562	29511	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-317-1	NZ_APVX01000016.1	-	30308	30257	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-316-1	NZ_APVW01000045.1	+	68928	68979	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-297-1	NZ_APVS01000015.1	-	30307	30256	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-311-1	NZ_ARRW01000042.1	-	30307	30256	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-320-1	NZ_APWB01000051.1	-	30308	30257	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-313-1	NZ_APVQ01000201.1	-	30314	30263	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-302-1	NZ_ARSJ01000095.1	-	30307	30256	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-309-1	NZ_ARSC01000038.1	+	68928	68979	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-304-1	NZ_AQOT01000031.1	+	68928	68979	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Kpn-203-2	NZ_ARVO01000169.1	-	30310	30259	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-303-1	NZ_ARPQ01000202.1	-	30308	30257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-204-2	NZ_ARVP01000082.1	+	68924	68975	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-307-1	NZ_ARPR01000083.1	+	22839	22890	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-219-1	NZ_AWOM01000016.1	-	30326	30275	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-220-1	NZ_AWON01000029.1	+	35737	35788	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-210-1	NZ_AVFD01000075.1	+	69293	69344	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-163-1	NZ_JSVB01000050.1	+	37050	37101	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-136-1	NZ_AQRD01000007.1	-	3937419	3937368	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-150-1	NZ_JJNB01000021.1	+	63818	63869	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-65-1	NZ_JJNG01000016.1	+	68967	69018	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-59-1	NZ_JJNH01000017.1	+	72322	72373	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-6-1	NZ_JDWP01000017.1	-	30401	30350	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-9-1	NZ_JDWM01000007.1	-	29721	29670	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-7-1	NZ_JDWO01000009.1	-	30401	30350	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-227-1	NZ_AFXH01000001.1	-	15574	15523	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-2-1	NZ_JDWN01000019.1	+	64235	64286	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-134-1	NZ_APMF01000021.1	-	30307	30256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-133-1	NZ_AOSJ01000020.1	-	30307	30256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-135-1	NZ_APMG01000019.1	-	30307	30256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-131-1	NZ_AQCJ01000019.1	-	30310	30259	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-132-1	NZ_AQCI01000019.1	+	68968	69019	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-330-1	NC_016845.1	+	90172	90223	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-351-1	NC_009648.1	+	4632889	4632940	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-216-1	NZ_CP007731.1	+	92618	92669	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-239-1	NZ_CP006659.1	+	90175	90226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-126-1	NZ_AUTW02000084.1	-	30242	30191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-1-1	NZ_CP010361.1	-	5219933	5219882	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-362-1	NZ_GG703533.1	+	65601	65652	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-91-1	NZ_KK214620.1	+	69995	70046	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-96-1	NZ_KK214479.1	+	69063	69114	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-109-1	NZ_KK214372.1	+	69063	69114	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-77-1	NZ_KK736955.1	+	581455	581506	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-123-1	NZ_KK737461.1	+	2876697	2876748	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-121-1	NZ_KK737432.1	+	73324	73375	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-155-1	NZ_KK737589.1	+	3182677	3182728	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-153-1	NZ_KK737549.1	-	634579	634528	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-154-1	NZ_KK737562.1	+	73376	73427	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-157-1	NZ_KK737614.1	+	71967	72018	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-152-1	NZ_KK737538.1	+	63914	63965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-196-1	NZ_KK737766.1	-	3724699	3724648	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-162-1	NZ_KK737679.1	+	68934	68985	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-156-1	NZ_KK737605.1	+	63679	63730	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-38-1	NZ_KK736604.1	+	69390	69441	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-148-1	NZ_KK737484.1	+	583791	583842	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-278-1	NZ_KK737503.1	+	4119556	4119607	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-192-1	NZ_KK737733.1	+	3278687	3278738	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-122-1	NZ_KK737447.1	+	4942116	4942167	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-158-1	NZ_KK737629.1	+	115507	115558	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-151-1	NZ_KK737530.1	+	4494417	4494468	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-188-1	NZ_KK737707.1	+	4500007	4500058	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-195-1	NZ_KK737755.1	+	1400819	1400870	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Kpn-160-1	NZ_KK737646.1	+	63830	63881	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-149-1	NZ_KK737520.1	-	78478	78427	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-187-1	NZ_KK737696.1	+	4798861	4798912	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-193-1	NZ_KK737742.1	+	4381090	4381141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-159-1	NZ_KK737636.1	+	3151654	3151705	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-120-1	NZ_KK737419.1	+	2864858	2864909	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-40-1	NZ_KK736624.1	+	3233701	3233752	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-42-1	NZ_KK736658.1	+	577414	577465	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-39-1	NZ_KK736620.1	+	63835	63886	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-110-1	NZ_KK737334.1	+	69390	69441	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-118-1	NZ_KK737405.1	+	2867900	2867951	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-50-1	NZ_KK736666.1	+	4827133	4827184	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-72-1	NZ_KK736890.1	+	69390	69441	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-97-1	NZ_KK737177.1	+	4679594	4679645	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-76-1	NZ_KK736937.1	+	3239685	3239736	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-41-1	NZ_KK736641.1	-	123068	123017	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-55-1	NZ_KK736735.1	+	1426606	1426657	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-90-1	NZ_KK737113.1	+	3359104	3359155	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-112-1	NZ_KK737351.1	+	69126	69177	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-51-1	NZ_KK736683.1	+	72227	72278	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-57-1	NZ_KK736760.1	+	3379575	3379626	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-67-1	NZ_KK736836.1	+	69126	69177	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-73-1	NZ_KK736899.1	+	73376	73427	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-104-1	NZ_KK737273.1	+	4895637	4895688	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-107-1	NZ_KK737307.1	+	4735918	4735969	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-64-1	NZ_KK736818.1	+	69126	69177	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-85-1	NZ_KK737050.1	+	4908031	4908082	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-94-1	NZ_KK737157.1	+	1431419	1431470	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-115-1	NZ_KK737382.1	+	64630	64681	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-116-1	NZ_KK737388.1	+	1428472	1428523	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-114-1	NZ_KK737366.1	+	1425775	1425826	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-102-1	NZ_KK737235.1	+	69390	69441	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-92-1	NZ_KK737128.1	+	69033	69084	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-103-1	NZ_KK737268.1	+	4887246	4887297	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-99-1	NZ_KK737192.1	+	3399123	3399174	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-78-1	NZ_KK736970.1	+	576185	576236	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-71-1	NZ_KK736871.1	+	582040	582091	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-79-1	NZ_KK736979.1	+	5071703	5071754	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-68-1	NZ_KK736847.1	+	69390	69441	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-87-1	NZ_KK737072.1	+	2869909	2869960	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-88-1	NZ_KK737090.1	+	3362502	3362553	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-106-1	NZ_KK737291.1	+	583431	583482	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-119-1	NZ_KK737414.1	+	4907268	4907319	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-111-1	NZ_KK737340.1	+	3355062	3355113	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-101-1	NZ_KK737216.1	+	3340842	3340893	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-84-1	NZ_KK737037.1	+	2868328	2868379	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-95-1	NZ_KK737167.1	+	3253271	3253322	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-117-1	NZ_KK737398.1	+	2884275	2884326	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-56-1	NZ_KK736752.1	+	73376	73427	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-75-1	NZ_KK736922.1	+	3226370	3226421	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-66-1	NZ_KK736824.1	+	2870499	2870550	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-83-1	NZ_KK737028.1	+	4924426	4924477	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Kpn-61-1	NZ_KK736786.1	+	3318945	3318996	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-80-1	NZ_KK736984.1	+	4535238	4535289	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-89-1	NZ_KK737103.1	+	2869188	2869239	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-105-1	NZ_KK737277.1	+	4533715	4533766	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-58-1	NZ_KK736771.1	+	578958	579009	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-147-1	NZ_KK737472.1	+	1117063	1117114	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-63-1	NZ_KK736804.1	+	3369698	3369749	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-124-1	NZ_KK737466.1	+	4912013	4912064	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-19-1	NZ_KK736587.1	+	3144951	3145002	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-98-1	NZ_KK737183.1	+	4638212	4638263	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-113-1	NZ_KK737354.1	+	3354410	3354461	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-108-1	NZ_KK737323.1	+	4751603	4751654	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-69-1	NZ_KK736861.1	+	70162	70213	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-81-1	NZ_KK737002.1	+	69390	69441	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-189-1	NZ_KK737711.1	+	4562420	4562471	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-74-1	NZ_KK736911.1	+	4523291	4523342	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-86-1	NZ_KK737063.1	+	69126	69177	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-60-1	NZ_KK736776.1	+	4900314	4900365	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-54-1	NZ_KK736708.1	+	2866599	2866650	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-82-1	NZ_KK737013.1	+	2866351	2866402	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-53-1	NZ_KK736703.1	+	63762	63813	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-191-1	NZ_KK737723.1	+	73376	73427	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-93-1	NZ_KK737140.1	+	2732162	2732213	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-62-1	NZ_KK736796.1	+	1430900	1430951	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-100-1	NZ_KK737201.1	+	68880	68931	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-172-1	NZ_KL407317.1	+	3279007	3279058	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-12-1	NZ_KL407321.1	+	2250192	2250243	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-24-1	NZ_KL407345.1	+	1374223	1374274	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ksp-5-1	NZ_JH414807.1	-	70580	70631	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-360-1	NZ_JH930422.1	-	123563	123512	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-358-1	NZ_JH930439.1	-	123670	123619	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-359-1	NZ_JH930419.1	+	5098754	5098805	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-361-1	NZ_JH930433.1	+	97306	97357	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-329-1	NZ_HF536482.1	+	5149422	5149473	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-245-1	NZ_KI535426.1	+	70377	70428	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-243-1	NZ_KI535444.1	+	495195	495246	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-285-1	NZ_KI535498.1	+	69087	69138	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-283-1	NZ_KI535509.1	+	4696783	4696834	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-277-1	NZ_KI535580.1	+	1331131	1331182	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-272-1	NZ_KI535620.1	+	73553	73604	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-270-1	NZ_KI535623.1	-	32015	31964	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-253-1	NZ_KI535560.1	+	69194	69245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-252-1	NZ_KI535573.1	-	30634	30583	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-251-1	NZ_KI535346.1	+	730498	730549	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-276-1	NZ_KI535587.1	+	1356604	1356655	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-282-1	NZ_KI535517.1	-	167340	167289	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-247-1	NZ_KI535416.1	+	492678	492729	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-250-1	NZ_KI535359.1	+	826395	826446	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-266-1	NZ_KI535679.1	-	127694	127643	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-286-1	NZ_KI535492.1	+	577955	578006	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-267-1	NZ_KI535678.1	+	4357833	4357884	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-284-1	NZ_KI535503.1	+	4585522	4585573	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Kpn-273-1	NZ_KI535611.1	+	70501	70552	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-249-1	NZ_KI535412.1	+	4539853	4539904	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-246-1	NZ_KI535420.1	+	4238528	4238579	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-269-1	NZ_KI535663.1	+	4648189	4648240	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-265-1	NZ_KI535689.1	+	68523	68574	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-221-1	NZ_KI517376.1	-	5252285	5252234	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-223-1	NZ_HG518477.1	-	4904955	4904904	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-22-1	NZ_KI929271.1	+	4503228	4503279	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-208-1	NZ_HG518479.1	-	4685746	4685695	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-224-1	NZ_HG518478.1	-	4726590	4726539	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-175-1	NZ_KK036648.1	+	4561960	4562011	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-179-1	NZ_KK036616.1	+	4695172	4695223	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-248-1	NZ_KK036740.1	+	1316016	1316067	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-182-1	NZ_KK036586.1	+	69272	69323	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-45-1	NZ_KK036932.1	+	66222	66273	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-184-1	NZ_KK036571.1	+	4342385	4342436	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-37-1	NZ_KK036686.1	+	4560269	4560320	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-146-1	NZ_KK036944.1	+	2970777	2970828	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-271-1	NZ_KK036969.1	+	1997125	1997176	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-186-1	NZ_KK036555.1	+	1862408	1862459	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-35-1	NZ_KK036701.1	+	4380641	4380692	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-27-1	NZ_KK036732.1	+	2646020	2646071	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-176-1	NZ_KK036640.1	+	580651	580702	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-183-1	NZ_KK036575.1	+	4843690	4843741	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-180-1	NZ_KK036610.1	+	1384294	1384345	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-36-1	NZ_KK036697.1	+	69043	69094	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-44-1	NZ_KK036866.1	+	70380	70431	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-26-1	NZ_KK036882.1	+	68932	68983	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-21-1	NZ_KK036888.1	+	1217538	1217589	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-141-1	NZ_KK036984.1	+	71754	71805	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-177-1	NZ_KK036634.1	+	694277	694328	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-198-1	NZ_KK037007.1	+	2272584	2272635	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-29-1	NZ_KK036680.1	+	326960	327011	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-185-1	NZ_KK036563.1	+	4808777	4808828	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-23-1	NZ_KK036758.1	+	1229368	1229419	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-30-1	NZ_KK036718.1	+	4570752	4570803	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-18-1	NZ_KK036784.1	+	1382201	1382252	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-13-1	NZ_KK036863.1	+	66760	66811	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-32-1	NZ_KK036710.1	+	73184	73235	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-181-1	NZ_KK036593.1	+	4760906	4760957	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-197-1	NZ_KK036901.1	-	655958	655907	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-20-1	NZ_KK036779.1	+	73328	73379	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-43-1	NZ_KK037004.1	+	69390	69441	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-16-1	NZ_KK036799.1	-	127335	127284	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-11-1	NZ_KK036895.1	+	580946	580997	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-15-1	NZ_KK036828.1	+	4511150	4511201	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-49-1	NZ_KK036908.1	+	5252304	5252355	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-47-1	NZ_KK036921.1	+	4589468	4589519	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-28-1	NZ_KK036724.1	+	2619848	2619899	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-48-1	NZ_KK036911.1	+	3085051	3085102	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-25-1	NZ_KK036744.1	+	3484063	3484114	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-14-1	NZ_KK036838.1	+	4750317	4750368	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Kpn-33-1	NZ_KK036705.1	+	4723059	4723110	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-145-1	NZ_KK036949.1	+	4329695	4329746	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-173-1	NZ_KK036663.1	-	661579	661528	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-144-1	NZ_KK036953.1	+	1102473	1102524	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-174-1	NZ_KK036655.1	+	801825	801876	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-178-1	NZ_KK037012.1	+	1362262	1362313	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-34-1	NZ_KK037013.1	-	608696	608645	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-349-1	NZ_JH930400.1	-	121654	121603	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-139-1	NZ_KE504626.1	-	5255393	5255342	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-140-1	NZ_KE504629.1	-	5515152	5515101	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-279-1	NC_012731.1	+	89967	90018	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-261-1	NC_017540.1	+	5087242	5087293	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-202-1	NZ_CP011989.1	-	5205226	5205175	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-201-1	NZ_CP011985.1	-	5196465	5196414	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-125-1	NZ_CP011976.1	-	5269356	5269305	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-325-1	NC_018522.1	-	5262049	5261998	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-260-1	NC_022082.1	-	5183982	5183931	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-254-1	NC_022566.1	+	4488386	4488437	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-1-2	NZ_CP008929.1	+	1842237	1842288	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-1-3	NZ_CP009461.1	-	4775192	4775141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-206-1	NZ_CP009775.1	+	90073	90124	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-206-2	NZ_CP009872.1	+	90073	90124	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-206-3	NZ_CP009771.1	+	90073	90124	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-206-4	NZ_CP009863.1	+	85038	85089	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-129-1	NZ_CP006738.1	-	5209835	5209784	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-207-1	NZ_CP006722.1	-	5216292	5216241	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-1-4	NZ_CP010392.1	-	5189077	5189026	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-1-9	NZ_LK022721.1	+	63891	63942	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-222-1	NZ_CP006798.1	-	3463792	3463741	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-218-1	NZ_CP003999.1	-	5187695	5187644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-17-1	NZ_KK036791.1	+	1461115	1461166	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-4-1	NZ_CP006923.1	-	5138876	5138825	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-5-1	NZ_CP006918.1	-	5168803	5168752	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-214-1	NZ_CP007727.1	+	90073	90124	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-52-1	NZ_KK736687.1	+	69390	69441	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-215-1	NZ_CP008797.1	+	90073	90124	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-217-1	NZ_CP008831.1	+	90073	90124	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-213-1	NZ_CP008827.1	+	90073	90124	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-1-5	NZ_CP009114.1	+	3598750	3598801	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-206-5	NZ_CP009208.1	-	3330554	3330503	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-8-1	NZ_CP011980.1	-	5183712	5183661	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-902-1	NZ_KI522728.1	+	10412	10463	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-225-1	NC_021232.1	+	194552	194603	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-1-6	NZ_CP011578.1	+	3572358	3572409	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-1-7	NZ_CP011647.1	+	1269750	1269801	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-1-8	NZ_CP011624.1	-	2090102	2090051	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-324-1	NZ_AOIZ01000021.1	-	8000	7949	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-238-1	NZ_AOGQ01000046.1	+	69011	69062	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-327-1	NZ_AQCG01001093.1	+	1849	1900	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ksp-1-1	NZ_AKYX01000005.1	+	73137	73188	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-137-1	NZ_AQPG01000012.1	+	5338757	5338808	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-170-1	NZ_JAQL01000017.1	-	30330	30279	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Kpn-171-1	NZ_JAQM01000046.1	-	15043	14992	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-259-1	NZ_ANGH02000122.1	-	30407	30356	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-333-1	NZ_AKAF01000019.1	+	69079	69130	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-335-1	NZ_AKAH01000021.1	+	69289	69340	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-338-1	NZ_AJZV01000021.1	+	69354	69405	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kpn-334-1	NZ_AKAG01000020.1	-	30706	30655	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-754	topACOD.FV90NF401A4K61	+	172	223	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-755	CLOF_F4EQGSL02IC6OG	-	459	408	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-756	CLOF_F4EQGSL02FU17A	-	147	96	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kcr-1-1	NZ_LGHZ01000022.1	+	77178	77229	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Kas-1-1	NZ_JMPL01000010.1	+	63578	63629	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Fhe-1-1	NZ_JVIC01000038.1	+	35499	35550	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Fhe-4-1	NZ_AWFX01000038.1	-	54843	54792	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Fhe-2-1	NZ_AXDL01000043.1	-	6798	6747	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Fpu-1-1	NZ_LFEJ01000010.1	+	152430	152481	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Fpu-3-1	NZ_AXSY01000052.1	-	32389	32338	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Fpu-2-1	NZ_AXSZ01000028.1	-	11077	11026	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Fpu-4-1	NZ_JHYZ01000015.1	-	32736	32685	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Fhe-3-1	NZ_AXDK01000124.1	-	8590	8539	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Fpu-5-1	NZ_AWFY01000004.1	+	156607	156658	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Cne-1-1	NZ_CP009459.1	+	1199721	1199772	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Cne-1-2	NZ_CP009458.1	+	1216774	1216825	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Esp-68-1	NZ_AKXM01000024.1	+	88396	88447	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Cne-1-3	NZ_CP009451.1	-	2536387	2536336	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Cda-1-1	NZ_KE161030.1	+	4763143	4763194	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sco-2-1	NZ_JMSQ01000013.1	+	67335	67386	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Bag-2-1	NZ_JMPI01000074.1	+	98246	98298	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ebl-1-1	NC_017910.1	-	3996940	3996888	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbl-1-1	NZ_BAHA01000017.1	+	91171	91223	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-311-1	NC_010067.1	-	3496303	3496251	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-3-1	NZ_CP006693.1	-	3463342	3463290	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-1013-1	NZ_ABAN01000010.1	-	45116	45064	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-89-1	NZ_JRLP01000010.1	+	43143	43195	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-729-1	NZ_JSWQ01000008.1	-	49158	49106	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-1007-1	NZ_ABEL01000012.1	-	37576	37524	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-1030-1	NZ_ABF01000013.1	-	37462	37410	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-1028-1	NZ_ABAO01000008.1	+	112768	112820	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-1008-1	NZ_ABEI01000014.1	+	110111	110163	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-239-1	NZ_ARYW01000006.1	-	45147	45095	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-940-1	NZ_AOXX01000025.1	+	95096	95148	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-929-1	NZ_AHUI01000026.1	+	42783	42835	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-58-1	NZ_JRLS01000058.1	+	4123	4175	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-111-1	NZ_JXXJ01000012.1	-	45085	45033	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-329-1	NZ_CATD01000035.1	-	37552	37500	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-350-1	NZ_CATW01000042.1	-	37552	37500	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-408-1	NZ_CARI01000040.1	+	111839	111891	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-413-1	NZ_CARD01000040.1	-	37553	37501	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-403-1	NZ_CARL01000082.1	+	25648	25700	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-1	NZ_CDLI01000125.1	-	39519	39467	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-1027-2	NZ_ABEJ01000012.1	+	103003	103055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-1009-1	NZ_ABAK02000001.1	+	3619652	3619704	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-1010-1	NZ_ABEW01000011.1	+	105665	105717	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-813-1	NZ_AESY01000065.1	-	35204	35152	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-228-1	NZ_JZWK01000010.1	-	45598	45546	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-756-1	NZ_AMNZ01000014.1	+	44988	45040	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-188-1	NZ_AMOF01000015.1	+	100319	100371	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-185-1	NZ_AMOC01000019.1	-	37507	37455	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-184-1	NZ_AMOA01000042.1	-	37497	37445	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-187-1	NZ_AMOE01000058.1	+	100554	100606	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-189-1	NZ_AMOG01000112.1	+	58896	58948	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-112-1	NZ_JZUV01000021.1	+	104758	104810	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-113-1	NZ_JZUW01000036.1	-	49763	49711	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-222-1	NZ_AMLQ01000020.1	-	37602	37550	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-220-1	NZ_AMLS01000127.1	-	14386	14334	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-186-1	NZ_AMOD01000033.1	+	100556	100608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-192-1	NZ_AMOJ01000025.1	-	37710	37658	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-190-1	NZ_AMOH01000008.1	-	37530	37478	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-759-1	NZ_AMOI01000089.1	-	37516	37464	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-191-1	NZ_AMOK01000144.1	+	100556	100608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-232-1	NZ_JZUW01000023.1	+	129364	129416	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-758-1	NZ_AMOB01000059.1	+	100641	100693	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-309-1	NZ_JXTT01000068.1	+	95702	95754	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-167-1	NZ_LAPA01000017.1	-	45228	45176	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-1	NZ_LAPK01000016.1	-	37548	37496	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-286-1	NZ_LAPB01000004.1	-	45128	45076	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-167-2	NZ_LAPE01000030.1	+	100068	100120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-167-3	NZ_LAOV01000025.1	-	45125	45073	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-2	NZ_LAPI01000047.1	+	100376	100428	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-1	NZ_LAOZ01000065.1	-	37573	37521	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-3	NZ_LAPJ01000049.1	-	37548	37496	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-2	NZ_LAOT01000033.1	-	37573	37521	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-3	NZ_LAOW01000010.1	-	15419	15367	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-4	NZ_LAOS01000078.1	-	17555	17503	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-4	NZ_LAPL01000035.1	+	55787	55839	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-98-1	NZ_JMML02000005.1	+	103476	103528	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-856-1	NZ_AOYV01000096.1	-	45077	45025	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-167-4	NZ_LHHD01000025.1	-	45515	45463	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-167-5	NZ_LHIP01000011.1	-	45288	45236	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-167-6	NZ_LHNA01000015.1	+	100286	100338	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-5	NZ_LHNR01000007.1	-	37518	37466	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-6	NZ_LHEU01000001.1	-	37518	37466	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-7	NZ_LHFX01000020.1	-	37518	37466	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-8	NZ_LHGB01000017.1	-	37518	37466	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-50	NZ_LHHQ01000072.1	-	37518	37466	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-9	NZ_LHHT01000023.1	-	37518	37466	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-167-7	NZ_LHIZ01000020.1	+	100286	100338	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-167-8	NZ_LHJE01000040.1	+	100286	100338	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-10	NZ_LHKX01000011.1	+	43559	43611	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-771-1	NZ_AMMK01000337.1	-	34305	34253	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-2	NZ_CUZH01000020.1	-	39384	39332	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-1	NZ_CTNK01000018.1	+	42508	42560	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-755-1	NZ_AMMO01000064.1	+	1167	1219	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-196-1	NZ_AMON01000006.1	-	37717	37665	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-3	NZ_CUZP01000016.1	-	39536	39484	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-288-4	NZ_CUZJ01000016.1	+	104156	104208	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-194-1	NZ_AMOL01000071.1	-	37527	37475	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-5	NZ_CUZY01000016.1	-	39534	39482	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-11	NZ_LHEG01000017.1	-	37518	37466	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-12	NZ_LHEK01000011.1	+	43461	43513	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-13	NZ_LHEL01000026.1	+	43461	43513	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-14	NZ_LHGF01000016.1	-	37788	37736	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-15	NZ_LHHU01000005.1	-	37758	37706	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-130-1	NZ_LHJK01000002.1	-	43074	43022	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-5	NZ_LHIA01000022.1	+	110618	110670	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-6	NZ_LHIU01000047.1	-	37837	37785	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-12-1	NZ_LHJT01000036.1	-	37541	37489	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-16	NZ_LHIY01000013.1	+	43461	43513	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-129-1	NZ_LHLL01000005.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-14-1	NZ_LHNN01000010.1	+	106822	106874	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-17	NZ_LHMK01000033.1	-	3250	3198	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-18	NZ_LHMM01000016.1	+	100688	100740	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-137-1	NZ_LHNP01000044.1	+	33072	33124	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-5-1	NZ_LHNO01000020.1	-	45358	45306	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-7	NZ_LHOC01000018.1	+	43745	43797	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-14-2	NZ_LHGC01000023.1	-	41667	41615	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-19	NZ_LHOD01000025.1	+	100688	100740	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-138-1	NZ_LHHP01000012.1	-	49389	49337	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-5-2	NZ_LHOM01000026.1	+	104489	104541	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-20	NZ_LHOW01000002.1	-	37758	37706	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-137-2	NZ_LHKI01000166.1	+	4122	4174	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-8	NZ_LHDM01000014.1	-	37858	37806	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-138-2	NZ_LHLY01000014.1	+	104581	104633	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-9	NZ_LHEN01000003.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-138-3	NZ_LHMB01000021.1	-	49457	49405	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-10	NZ_LHEZ01000010.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-11	NZ_LHFO01000006.1	-	37858	37806	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-130-2	NZ_LHMR01000007.1	-	43074	43022	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-12	NZ_LHHH01000031.1	+	110443	110495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-13	NZ_LHJC01000006.1	+	110627	110679	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-14	NZ_LHKJ01000025.1	+	110443	110495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-12-2	NZ_LHET01000013.1	+	80459	80511	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-15-1	NZ_LHFH01000010.1	+	98924	98976	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-15	NZ_LHLB01000016.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-16	NZ_LHLC01000015.1	-	38115	38063	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-130-3	NZ_LHHJ01000016.1	-	43074	43022	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-17	NZ_LHLG01000042.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-14-3	NZ_LHIF01000005.1	-	41667	41615	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-12-3	NZ_LHKF01000013.1	+	141508	141560	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-18	NZ_LHLT01000024.1	+	110443	110495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-129-2	NZ_LHKW01000027.1	+	134845	134897	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-6-1	NZ_LHMF01000001.1	-	45365	45313	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-6-2	NZ_LHNW01000009.1	+	104489	104541	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-21	NZ_LHOB01000004.1	-	37787	37735	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-15-2	NZ_LHFG01000019.1	+	98923	98975	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-112-2	NZ_LHGO01000001.1	-	49213	49161	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-224-1	NZ_LHOL01000024.1	+	118678	118730	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-112-3	NZ.LHGP01000036.1	-	49493	49441	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-19	NZ.LHOT01000027.1	-	38140	38088	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-5-3	NZ.LHEA01000014.1	+	134515	134567	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-137-3	NZ.LHHE01000026.1	+	33061	33113	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-137-4	NZ.LHKH01000008.1	+	4122	4174	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-138-4	NZ.LHMP01000018.1	-	49457	49405	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-224-2	NZ.LHHX01000010.1	-	337	285	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-138-5	NZ.LHOE01000015.1	-	49211	49159	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-5-4	NZ.LHKM01000033.1	+	43435	43487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-15-3	NZ.LHON01000004.1	+	98924	98976	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-6-3	NZ.LHMA01000017.1	+	104489	104541	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-137-5	NZ.LHJB01000007.1	+	95635	95687	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-6-4	NZ.LHLX01000040.1	-	45358	45306	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-6-5	NZ.LHLF01000017.1	+	104489	104541	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-14-4	NZ.LHKN01000021.1	+	106828	106880	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-6	NZ.CUYH01000014.1	-	41503	41451	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-1	NZ.LHFT01000001.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-2	NZ.LHFW01000015.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-3	NZ.LHGI01000004.1	+	104488	104540	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-4	NZ.LHHK01000013.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-5	NZ.LHIW01000004.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-286-2	NZ.LHEO01000040.1	+	4123	4175	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-280-1	NZ.LHOQ01000013.1	+	104644	104696	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-280-2	NZ.LHDZ01000014.1	-	37830	37778	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-6	NZ.LHED01000008.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-7	NZ.LHER01000039.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-8	NZ.LHEX01000022.1	+	104409	104461	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-9	NZ.LHFF01000003.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-10	NZ.LHFP01000006.1	+	43372	43424	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-11	NZ.LHGI01000015.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-12	NZ.LHGL01000067.1	-	45407	45355	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-13	NZ.LHHB01000046.1	-	45296	45244	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-14	NZ.LHID01000028.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-15	NZ.LHIQ01000056.1	+	43376	43428	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-16	NZ.LHIX01000050.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-17	NZ.LHJZ01000008.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-18	NZ.LHKD01000012.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-19	NZ.LHKL01000021.1	+	43403	43455	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-20	NZ.LHKK01000020.1	+	15365	15417	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-21	NZ.LHNG01000019.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-22	NZ.LHNL01000012.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-286-3	NZ.LHEF01000001.1	-	45301	45249	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-23	NZ.LHEP01000016.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-20	NZ.LHDL01000036.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-24	NZ.LHEW01000007.1	+	104297	104349	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-25	NZ.LHEY01000045.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-21	NZ.LHDS01000006.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-26	NZ.LHFU01000021.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-22	NZ.LHEC01000015.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-27	NZ.LHGH01000007.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-286-4	NZ.LHHI01000015.1	+	4124	4176	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-28	NZ.LHIE01000025.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-226-1	NZ_LHIM01000031.1	-	45095	45043	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-29	NZ_LHIK01000030.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-23	NZ_LHJO01000023.1	+	110443	110495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-30	NZ_LHJJ01000014.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-24	NZ_LHLR01000018.1	+	110489	110541	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-31	NZ_LHLO01000017.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-25	NZ_LHMN01000017.1	+	110595	110647	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-32	NZ_LHLP01000013.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-26	NZ_LHMQ01000007.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-233-1	NZ_LHNX01000010.1	+	97858	97910	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-33	NZ_LHNI01000006.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-230-1	NZ_LHOI01000018.1	+	101470	101522	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-226-2	NZ_LHIN01000021.1	+	99690	99742	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-34	NZ_LHGY01000018.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-35	NZ_LHJU01000006.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-227-1	NZ_LHLZ01000020.1	+	104655	104707	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-230-2	NZ_LHOS01000013.1	-	37982	37930	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-36	NZ_LHOJ01000015.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-27	NZ_LHDO01000014.1	+	110443	110495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-286-5	NZ_LHEH01000008.1	+	105522	105574	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-28	NZ_LHEB01000004.1	-	37858	37806	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-37	NZ_LHOH01000009.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-29	NZ_LHEI01000015.1	-	37858	37806	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-1	NZ_LLHS01000005.1	-	45233	45181	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-226-3	NZ_LHGE01000011.1	-	45335	45283	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-38	NZ_LHJF01000021.1	+	104297	104349	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-30	NZ_LHGN01000027.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-39	NZ_LHKA01000019.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-40	NZ_LHLK01000012.1	-	45428	45376	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-226-4	NZ_LHIG01000022.1	+	99667	99719	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-41	NZ_LHMT01000039.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-2	NZ_LHIJ01000001.1	+	105504	105556	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-42	NZ_LHOG01000039.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-233-2	NZ_LHKV01000011.1	+	129710	129762	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-43	NZ_LHEQ01000030.1	-	45300	45248	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-31	NZ_LHKZ01000044.1	+	110628	110680	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-44	NZ_LHFB01000001.1	-	45428	45376	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-32	NZ_LHLN01000022.1	+	110627	110679	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-45	NZ_LHFS01000008.1	+	104297	104349	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-33	NZ_LHMG01000021.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-46	NZ_LHFV01000011.1	+	43443	43495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-34	NZ_LHOR01000003.1	+	110443	110495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-47	NZ_LHGZ01000018.1	-	45557	45505	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-3	NZ_LHDR01000020.1	-	45233	45181	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-308-1	NZ_LHIL01000010.1	-	37811	37759	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-233-3	NZ_LHGG01000023.1	-	35466	35414	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-48	NZ_LHIR01000020.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-35	NZ_LHGX01000039.1	+	110443	110495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-49	NZ_LHKC01000026.1	-	45297	45245	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-36	NZ_LHHC01000016.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-50	NZ_LHLA01000003.1	+	104298	104350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-230-3	NZ_LHHR01000021.1	-	37982	37930	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-308-2	NZ_LHOK01000024.1	+	100381	100433	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-227-2	NZ_LHHW01000019.1	-	45628	45576	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-37	NZ_LHJM01000029.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-38	NZ_LHJP01000060.1	-	14715	14663	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-4	NZ_LHKR01000017.1	-	45233	45181	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-308-3	NZ_LHGK01000003.1	-	37864	37812	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-233-4	NZ_LHKY01000034.1	-	35226	35174	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-5	NZ_LHLW01000028.1	+	170370	170422	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-39	NZ_LHNZ01000016.1	+	104535	104587	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-40	NZ_LHOU01000014.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-6	NZ_LHFZ01000007.1	-	45233	45181	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-228-2	NZ_LHGD01000004.1	-	45717	45665	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-41	NZ_LHJQ01000014.1	+	110332	110384	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-42	NZ_LHLE01000029.1	-	38116	38064	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-43	NZ_LHNJ01000028.1	-	38141	38089	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-7	NZ_LHDX01000028.1	-	45233	45181	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-8	NZ_LHOV01000014.1	+	170530	170582	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-9	NZ_LHJA01000018.1	+	170373	170425	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-1	NZ_LHEJ01000024.1	+	4123	4175	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-44	NZ_LHJV01000040.1	+	110443	110495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-10	NZ_LHEM01000027.1	-	45233	45181	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-45	NZ_LHJW01000015.1	+	110598	110650	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-46	NZ_LHMU01000012.1	-	37859	37807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-270-1	NZ_LHFR01000039.1	-	45189	45137	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-47	NZ_LHHA01000023.1	+	43611	43663	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-1	NZ_LHfy01000007.1	+	104454	104506	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-11	NZ_LHGR01000017.1	-	45233	45181	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-12	NZ_LHHF01000011.1	-	45532	45480	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-2	NZ_LHIC01000007.1	+	104453	104505	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-3	NZ_LHIH01000022.1	+	104454	104506	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-4	NZ_LHIS01000017.1	+	104453	104505	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-5	NZ_LHKB01000030.1	-	45232	45180	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-2	NZ_LHKE01000013.1	-	35503	35451	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-277-1	NZ_LHKG01000033.1	+	97652	97704	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-6	NZ_LHLI01000036.1	+	43581	43633	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-13	NZ_LHMH01000002.1	+	170373	170425	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-3	NZ_LHMV01000016.1	+	103255	103307	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-7	NZ_LHDT01000024.1	+	104454	104506	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-8	NZ_LHHN01000005.1	+	104454	104506	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-4	NZ_LHJG01000019.1	-	2093	2041	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-9	NZ_LHJN01000001.1	-	45365	45313	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-10	NZ_LHJM01000035.1	+	8177	8229	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-5	NZ_LHMX01000008.1	+	4123	4175	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-6	NZ_LHNF01000052.1	-	2092	2040	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-7	NZ_LHNY01000033.1	-	2091	2039	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-11	NZ_LHDY01000004.1	+	104454	104506	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-8	NZ_LHFI01000008.1	+	103254	103306	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-12	NZ_LHGG01000010.1	-	45505	45453	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-9	NZ_LHHM01000020.1	-	35738	35686	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-13	NZ_LHII01000006.1	-	45365	45313	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-243-1	NZ_LHIV01000005.1	-	45298	45246	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-308-4	NZ_LHGV01000009.1	-	37811	37759	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-277-2	NZ.LHJD01000020.1	+	97390	97442	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-14	NZ.LHJS01000013.1	-	45326	45274	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-15	NZ.LHKS01000005.1	+	19850	19902	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-16	NZ.LHKT01000094.1	+	19849	19901	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-10	NZ.LHLQ01000028.1	-	2093	2041	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-240-1	NZ.LHMO01000017.1	-	35408	35356	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-14	NZ.LHNT01000030.1	+	34658	34710	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-237-15	NZ.LHOO01000015.1	+	170400	170452	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-11	NZ.LHDW01000023.1	-	2091	2039	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-277-3	NZ.LHGA01000003.1	+	97652	97704	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-17	NZ.LHIT01000015.1	-	45365	45313	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-18	NZ.LLHJH01000036.1	-	3114	3062	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-19	NZ.LLHH01000022.1	-	45244	45192	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-277-4	NZ.LHML01000023.1	-	3161	3109	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-277-5	NZ.LHMZ01000005.1	-	35557	35505	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-20	NZ.LHOA01000019.1	+	104454	104506	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-12	NZ.LHOP01000008.1	+	42069	42121	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-280-3	NZ.LHNK01000016.1	-	38071	38019	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-279-13	NZ.LHGW01000029.1	-	35431	35379	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-278-21	NZ.LHJR01000005.1	+	104169	104221	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-7	NZ.CHFY01000014.1	-	39456	39404	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-2	NZ.CTGT01000031.1	+	13413	13465	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-3	NZ.CTGI01000018.1	-	45153	45101	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-4	NZ.CTIE01000017.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-8	NZ.CUY01000016.1	-	39532	39480	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-9	NZ.CUZT01000016.1	-	39535	39483	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-10	NZ.CUZD01000016.1	-	39530	39478	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-11	NZ.CUYL01000013.1	-	41231	41179	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-12	NZ.CUZG01000016.1	-	39532	39480	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-13	NZ.CUZB01000013.1	-	41498	41446	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-14	NZ.CUZE01000016.1	-	39526	39474	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-15	NZ.CUY01000016.1	+	104146	104198	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-16	NZ.CUZV01000016.1	-	39537	39485	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-17	NZ.CUZM01000016.1	+	103905	103957	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-18	NZ.CUZK01000016.1	+	104178	104230	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-5	NZ.CTMV01000010.1	-	37187	37135	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-6	NZ.CTJ01000017.1	+	42456	42508	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-7	NZ.CTHA01000017.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-8	NZ.CTLT01000019.1	-	45112	45060	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-9	NZ.CTHV01000017.1	-	45337	45285	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-10	NZ.CTQD01000017.1	-	45198	45146	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-19	NZ.CUYM01000016.1	-	39531	39479	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-20	NZ.CUZF01000016.1	-	39535	39483	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-772-1	NZ.AMME01000310.1	+	12820	12872	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-21	NZ.CUZA01000016.1	+	104133	104185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-22	NZ.CUZN01000016.1	-	39532	39480	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-23	NZ.CUZO01000017.1	+	104197	104249	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-751-1	NZ.AMMI01000362.1	+	28318	28370	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-1107	NZ.CUZW01000016.1	+	104149	104201	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-24	NZ.CUYK01000016.1	+	104120	104172	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-25	NZ.CUYV01000016.1	-	39527	39475	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-180-1	NZ.AMMA01000024.1	-	37602	37550	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-288-26	NZ_CUYJ01000015.1	-	39535	39483	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-753-1	NZ_AMMG01000052.1	+	100556	100608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-27	NZ_CUYU01000016.1	+	104154	104206	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-750-1	NZ_AMMH01000191.1	+	66756	66808	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-754-1	NZ_AMMN01000182.1	-	32704	32652	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-179-1	NZ_AMMR01000082.1	+	100658	100710	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-11	NZ_CTPQ01000018.1	-	46977	46925	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-182-1	NZ_AMMU01000426.1	+	58961	59013	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-12	NZ_CTGR01000022.1	-	45111	45059	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-28	NZ_CUZX01000016.1	+	104147	104199	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-29	NZ_CUYW01000016.1	-	39536	39484	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-30	NZ_CUZS01000016.1	+	104156	104208	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-31	NZ_CUYT01000016.1	-	39526	39474	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-32	NZ_CUZR01000016.1	-	39535	39483	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-33	NZ_CUYZ01000016.1	-	39534	39482	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-178-1	NZ_AMLY01000042.1	+	100656	100708	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-183-1	NZ_AMMD01000057.1	+	20766	20818	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-34	NZ_CUYO01000010.1	+	133787	133839	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-35	NZ_CUYS01000016.1	+	104149	104201	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-36	NZ_CUYX01000016.1	+	104141	104193	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-37	NZ_CUZI01000016.1	-	39536	39484	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-38	NZ_CUYI01000015.1	+	103893	103945	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-195-1	NZ_AMOM01000044.1	-	37502	37450	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-39	NZ_CUZU01000016.1	-	39527	39475	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-177-1	NZ_AMLZ01000013.1	-	37630	37578	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-752-1	NZ_AMMF01000163.1	-	21720	21668	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-774-1	NZ_AMMM01000001.1	+	9526	9578	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-176-1	NZ_AMMS01000110.1	-	37699	37647	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-7-1	NZ_LAPG01000029.1	+	104291	104343	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-7-2	NZ_LAPH01000026.1	-	45127	45075	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-7-3	NZ_LAPQ01000010.1	+	104291	104343	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-8-1	NZ_LHEE01000039.1	-	38019	37967	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-40	NZ_CUZQ01000017.1	-	39533	39481	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-41	NZ_CUYN01000014.1	-	41508	41456	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-42	NZ_CUYR01000016.1	-	39531	39479	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-216-1	NZ_AMLW01000211.1	-	1474	1422	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-43	NZ_CUZL01000015.1	+	103906	103958	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-44	NZ_CUYQ01000016.1	-	39568	39516	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-45	NZ_CUZC01000015.1	-	39558	39506	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-866-1	NZ_AUQP01000004.1	+	105451	105503	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-864-1	NZ_AUQR01000004.1	-	45390	45338	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-865-1	NZ_AUQQ01000005.1	-	45390	45338	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-291-5	NZ_LFDW01000010.1	-	588736	588684	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-291-6	NZ_LFGN01000015.1	-	504820	504768	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-137-6	NZ_LAZB01000004.1	+	95741	95793	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-133-1	NZ_LELI01000015.1	-	36659	36607	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-242-1	NZ_LFIH01000123.1	-	559	507	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo → hypo →
Sen-248-1	NZ_APGQ01000022.1	-	16137	16085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-46	NZ_CVQC01000013.1	-	41503	41451	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-249-1	NZ_APGS01000122.1	-	45070	45018	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-47	NZ_CDLH01000019.1	-	41652	41600	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-333-1	NZ_CATY01000043.1	+	111327	111379	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-245-1	NZ_APGT01000012.1	-	45268	45216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-246-1	NZ_APGV01000022.1	+	105431	105483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-244-1	NZ_APGU01000022.1	+	105431	105483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-250-1	NZ_APGR01000135.1	-	6913	6861	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-247-1	NZ_APHF01000061.1	+	105419	105471	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-898-1	NZ_AYEG01000116.1	-	45279	45227	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-930-1	NZ_AOYA01000083.1	-	35287	35235	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-369-1	NZ_AYDB01000067.1	+	111693	111745	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-2-1	NZ_LFCC01000063.1	+	17175	17227	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-261-1	NZ_APHB01000016.1	+	105451	105503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-48	NZ_CVQF01000016.1	+	104155	104207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-49	NZ_CVQB01000015.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-50	NZ_CVQO01000014.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-251-1	NZ_APHC01000073.1	+	20125	20177	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-51	NZ_CVQN01000010.1	+	133799	133851	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-52	NZ_CVPK01000016.1	+	104140	104192	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-53	NZ_CVPQ01000016.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-54	NZ_CVQM01000016.1	-	39532	39480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-55	NZ_CVPS01000016.1	-	39588	39536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-269-1	NZ_APGX01000014.1	-	45390	45338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-262-1	NZ_APGY01000013.1	+	105451	105503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-259-1	NZ_APGZ01000013.1	-	45274	45222	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-264-1	NZ_APHD01000133.1	-	2882	2830	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-265-1	NZ_APHE01000099.1	-	45389	45337	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-263-1	NZ_APHG01000048.1	+	105398	105450	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-268-1	NZ_APGW01000014.1	-	45390	45338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-260-1	NZ_APHA01000015.1	-	45273	45221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-22	NZ_LHMI01000009.1	+	100687	100739	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-23	NZ_LHDP01000023.1	-	37621	37569	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-24	NZ_LHFK01000021.1	-	37518	37466	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-25	NZ_LHFM01000003.1	+	100914	100966	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-26	NZ_LHFN01000033.1	-	36158	36106	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-51	NZ_LHHL01000008.1	+	42794	42846	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-27	NZ_LHHY01000001.1	-	37518	37466	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-28	NZ_LHIB01000026.1	-	37517	37465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-29	NZ_LHLM01000008.1	+	100688	100740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-30	NZ_LHMD01000023.1	+	100688	100740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-31	NZ_LHNQ01000030.1	+	43462	43514	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-32	NZ_LHNU01000034.1	+	100688	100740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-33	NZ_LHFD01000017.1	+	100590	100642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-34	NZ_LHFE01000007.1	+	100590	100642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-52	NZ_LHME01000039.1	-	37788	37736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-35	NZ_LHGU01000033.1	+	42035	42087	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-36	NZ_LHNV01000009.1	+	100688	100740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-37	NZ_LHDQ01000029.1	+	42035	42087	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-38	NZ_LHFJ01000018.1	+	100688	100740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-39	NZ_LHFK01000021.1	+	100688	100740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-40	NZ_LHHO01000035.1	+	43729	43781	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-41	NZ_LHJY01000010.1	+	100688	100740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-167-9	NZ_LHLD01000049.1	-	45288	45236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-42	NZ_LHLV01000033.1	+	42046	42098	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-167-10	NZ_LHND01000022.1	-	45288	45236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-167-11	NZ.LHNO01000018.1	-	45288	45236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-43	NZ.LHKU01000027.1	-	37758	37706	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-44	NZ.LHHS01000031.1	-	37517	37465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-45	NZ.LHJL01000038.1	+	100688	100740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-56	NZ.CVQG01000009.1	+	133788	133840	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-57	NZ.CVQD01000016.1	-	41505	41453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-58	NZ.CVQA01000015.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-59	NZ.CVPU01000016.1	-	39566	39514	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-60	NZ.CVPR01000016.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1108	NZ.CVPY01000015.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-61	NZ.CVPX01000016.1	+	104194	104246	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-62	NZ.CVPP01000016.1	+	104164	104216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-63	NZ.CVQK01000016.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-64	NZ.CVPZ01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-65	NZ.CVPM01000015.1	-	39556	39504	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-66	NZ.CVPO01000016.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1109	NZ.CVPW01000016.1	-	39512	39460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-67	NZ.CVPT01000016.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-68	NZ.CVPP01000016.1	+	103992	104044	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-69	NZ.CVPL01000014.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-70	NZ.CVPN01000016.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-71	NZ.CVQL01000015.1	+	104176	104228	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-72	NZ.CVQE01000015.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-73	NZ.CVQJ01000016.1	-	39531	39479	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-167-12	NZ.LHMY01000012.1	+	100286	100338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-167-13	NZ.LHNC01000011.1	-	45288	45236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-167-14	NZ.LHLS01000024.1	-	45288	45236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-167-15	NZ.LHFC01000001.1	+	100283	100335	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-167-16	NZ.LHGM01000010.1	+	55519	55571	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-167-17	NZ.LHNB01000004.1	+	100286	100338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-13	NZ.CTNF01000019.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-167-18	NZ.LHFA01000003.1	+	100286	100338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-74	NZ.CEYU01000021.1	+	26787	26839	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-75	NZ.CEXT01000016.1	+	104150	104202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-76	NZ.CJBN01000027.1	+	19742	19794	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-77	NZ.CJTY01000007.1	+	190518	190570	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-78	NZ.CJCM01000016.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-79	NZ.CJRP01000014.1	+	109738	109790	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-80	NZ.CJPH01000016.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-81	NZ.CIZR01000016.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-906-1	NZ.AOYL01000004.1	+	98734	98786	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-82	NZ.CJIY01000016.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-83	NZ.CEYF01000015.1	+	103788	103840	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-84	NZ.CJLH01000011.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-85	NZ.CIP01000004.1	+	104159	104211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-86	NZ.CJUT01000014.1	+	107995	108047	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-87	NZ.CJOV01000016.1	-	39723	39671	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-88	NZ.CEXS01000016.1	-	39532	39480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-89	NZ.CIZY01000011.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-90	NZ.CILO01000016.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-347-1	NZ.CASQ01000042.1	+	111150	111202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-392-1	NZ.CART01000035.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-377-1	NZ_AYCS01000004.1	+	111233	111285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-352-1	NZ_AYCL01000005.1	+	83635	83687	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-372-1	NZ_AOZV01000015.1	+	42798	42850	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-344-1	NZ_AYDI01000048.1	+	111595	111647	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-340-1	NZ_CASS01000018.1	+	111225	111277	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-348-1	NZ_CASO01000044.1	+	111150	111202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-349-1	NZ_CASO01000054.1	-	17553	17501	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-388-1	NZ_CARX01000045.1	-	37768	37716	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-393-1	NZ_CARS01000036.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-379-1	NZ_AYQ01000005.1	+	111262	111314	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-355-1	NZ_AYCM01000006.1	-	111260	111312	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-383-1	NZ_AYCO01000001.1	+	37555	37503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-384-1	NZ_AYCW01000013.1	+	111445	111497	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-342-1	NZ_AYDJ01000060.1	+	111622	111674	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-362-1	NZ_AYDH01000066.1	+	111625	111677	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-345-1	NZ_CATX01000012.1	+	112246	112298	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-390-1	NZ_CARV01000038.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-391-1	NZ_CARU01000036.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-346-1	NZ_AYCY01000031.1	+	11826	11878	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-366-1	NZ_AYDE01000034.1	+	111736	111788	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-365-1	NZ_AYDF01000058.1	+	111692	111744	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-341-1	NZ_CASR01000038.1	+	111200	111252	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-389-1	NZ_CARW01000047.1	+	111473	111525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-363-1	NZ_AYDG01000035.1	+	111679	111731	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-368-1	NZ_AYDC01000067.1	+	111674	111726	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-367-1	NZ_AYDD01000027.1	+	111684	111736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-376-1	NZ_CASB01000116.1	-	17617	17565	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-370-1	NZ_AYCT01000039.1	-	37612	37560	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-380-1	NZ_AYCP01000055.1	-	37519	37467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-373-1	NZ_CASD01000056.1	+	111150	111202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-374-1	NZ_CASC01000035.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-387-1	NZ_CATU01000036.1	+	55551	55603	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-385-1	NZ_CAAD01000062.1	+	61209	61261	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-353-1	NZ_CASM01000050.1	+	111284	111336	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-354-1	NZ_CASL01000044.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-359-1	NZ_CASH01000039.1	+	111150	111202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-360-1	NZ_CASG01000064.1	+	55563	55615	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-375-1	NZ_AYCX01000037.1	+	111230	111282	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-356-1	NZ_CASK01000036.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-378-1	NZ_AYCR01000008.1	+	83965	84017	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-364-1	NZ_CASE01000032.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-382-1	NZ_CARZ01000055.1	+	61126	61178	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-386-1	NZ_CARY01000035.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-351-1	NZ_CASN01000036.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-358-1	NZ_CASI01000035.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-371-1	NZ_CASF01000145.1	-	17572	17520	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-381-1	NZ_CASA01000057.1	+	61126	61178	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-357-1	NZ_CASJ01000039.1	+	143491	143543	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-91	NZ_CIXI01000014.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-92	NZ_CILL01000016.1	-	39381	39329	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-14	NZ_CQGP01000016.1	+	42532	42584	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-93	NZ_CIVV01000012.1	+	107996	108048	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-94	NZ.CINM01000012.1	+	133824	133876	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-95	NZ.CILS01000015.1	-	39542	39490	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-96	NZ.CJQE01000015.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-97	NZ.CJVR01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-98	NZ.CJMA01000010.1	-	41499	41447	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-99	NZ.CIWL01000015.1	+	103992	104044	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-100	NZ.CJNY01000010.1	+	104137	104189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-101	NZ.CJWX01000017.1	+	104185	104237	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-102	NZ.CJCL01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-103	NZ.CJG01000010.1	+	133795	133847	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-104	NZ.CIUZ01000017.1	+	104176	104228	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-105	NZ.CJIF01000016.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-106	NZ.CJKI01000006.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-107	NZ.CJMB01000015.1	+	104141	104193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-108	NZ.CJAS01000016.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-109	NZ.CIXD01000016.1	+	104172	104224	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-110	NZ.CJEU01000016.1	-	39537	39485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-111	NZ.CJUE01000003.1	-	216862	216810	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-112	NZ.CJKA01000002.1	+	434934	434986	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-113	NZ.CJYE01000015.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-114	NZ.CIUT01000015.1	+	107848	107900	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-115	NZ.CIWB01000015.1	-	39506	39454	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-116	NZ.CJLA01000015.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-117	NZ.CJTN01000014.1	-	39372	39320	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-118	NZ.CJVE01000017.1	-	39385	39333	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-119	NZ.CJZC01000014.1	+	107832	107884	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-120	NZ.CJSE01000014.1	+	104161	104213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-69-1	NZ.JMMG01000025.1	-	45104	45052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-121	NZ.CJDT01000016.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-122	NZ.CJVQ01000001.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-423-1	NZ.ANOT01000041.1	+	116944	116996	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-123	NZ.CJWR01000013.1	-	41253	41201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-398-1	NZ.CARP01000034.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-124	NZ.CJJP01000015.1	+	104140	104192	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-125	NZ.CJHA01000015.1	-	39531	39479	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-405-1	NZ.CARK01000035.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-126	NZ.CJHK01000014.1	-	39564	39512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-411-1	NZ.CARF01000053.1	+	40879	40931	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-127	NZ.CIYT01000003.1	-	198399	198347	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-128	NZ.CJOD01000016.1	-	39537	39485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-420-1	NZ.AYDX01000010.1	+	111568	111620	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-129	NZ.CIXO01000014.1	-	39528	39476	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-394-1	NZ.AYCV01000014.1	+	111281	111333	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-130	NZ.CIVB01000016.1	-	39541	39489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-131	NZ.CJLB01000010.1	+	133796	133848	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-433-1	NZ.AOZP01000119.1	+	95342	95394	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-132	NZ.CJPV01000009.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-424-1	NZ.ANOU01000032.1	+	111695	111747	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-133	NZ.CIVX01000015.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-134	NZ.CJQJ01000009.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-399-1	NZ.CARO01000044.1	+	111371	111423	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-135	NZ.CJXW01000016.1	+	104185	104237	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-407-1	NZ_CARJ01000039.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-136	NZ_CJAD01000016.1	-	39569	39517	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-419-1	NZ_AYDW01000050.1	+	48948	49000	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-137	NZ_CIVW01000016.1	+	104014	104066	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-417-1	NZ_AYDN01000011.1	-	37792	37740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-138	NZ_CJNW01000013.1	+	107993	108045	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-438-1	NZ_AOZQ01000041.1	+	103718	103770	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1110	NZ_CIYE01000016.1	-	39531	39479	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-139	NZ_CJAU01000016.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-140	NZ_CJGP01000015.1	+	104038	104090	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-141	NZ_CJQA01000017.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-142	NZ_CJFS01000016.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-143	NZ_CJH01000014.1	-	41507	41455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-144	NZ_CIWD01000015.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-145	NZ_CIVF01000017.1	-	39385	39333	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-146	NZ_CJGL01000015.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-147	NZ_CIVT01000016.1	-	39387	39335	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-148	NZ_CJIM01000014.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-149	NZ_CJQP01000016.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-150	NZ_CIZD01000016.1	-	39533	39481	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-151	NZ_CIXK01000015.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-152	NZ_CJUD01000016.1	+	104141	104193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-153	NZ_CJCS01000016.1	-	39573	39521	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-154	NZ_CJOE01000016.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-155	NZ_CIYS01000014.1	+	107961	108013	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-156	NZ_CJVA01000015.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-157	NZ_CILV01000012.1	+	107993	108045	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-158	NZ_CJBL01000016.1	+	104155	104207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-159	NZ_CJBS01000017.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-160	NZ_CIWK01000014.1	+	107980	108032	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-161	NZ_CIZB01000016.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-162	NZ_CJEJ01000015.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-163	NZ_CJLD01000014.1	-	39570	39518	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-164	NZ_CIWI01000014.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-165	NZ_CJUM01000016.1	-	39371	39319	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-166	NZ_CJAE01000016.1	+	104155	104207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1111	NZ_CJJU01000015.1	-	39572	39520	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-167	NZ_CJUN01000016.1	-	39366	39314	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-168	NZ_CJYM01000015.1	-	39372	39320	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-169	NZ_CJKT01000014.1	+	104147	104199	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-170	NZ_CIXM01000015.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-171	NZ_CILK01000016.1	-	39379	39327	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-172	NZ_CJXI01000017.1	-	39543	39491	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-173	NZ_CJAO01000016.1	+	104150	104202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-174	NZ_CJTQ01000015.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-175	NZ_CJUA01000016.1	-	39370	39318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-176	NZ_CEXO01000015.1	+	104143	104195	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-177	NZ_CJMK01000015.1	-	39353	39301	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-178	NZ_CJMR01000016.1	+	104017	104069	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-179	NZ_CJTK01000015.1	+	104163	104215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-180	NZ_CJBR01000014.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-181	NZ_CJCP01000015.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-182	NZ.CJGG01000016.1	+	104146	104198	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-183	NZ.CJNK01000014.1	-	41504	41452	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-184	NZ.CJIL01000012.1	+	135291	135343	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-185	NZ.CJNR01000015.1	-	41512	41460	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-186	NZ.CJHU01000015.1	+	104200	104252	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-187	NZ.CJAA01000015.1	-	39626	39574	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-188	NZ.CJDF01000008.1	-	39456	39404	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-189	NZ.CJVD01000013.1	+	104003	104055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-190	NZ.CJRZ01000015.1	+	104157	104209	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-191	NZ.CJSU01000015.1	-	41231	41179	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-192	NZ.CJJC01000014.1	-	41500	41448	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-193	NZ.CJER01000016.1	-	39536	39484	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-194	NZ.CJKY01000009.1	-	39562	39510	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-1112	NZ.CIXE01000015.1	-	39353	39301	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-195	NZ.CJUG01000006.1	+	190341	190393	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-196	NZ.CJPN01000008.1	-	39601	39549	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-197	NZ.CJJD01000011.1	+	136982	137034	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-1113	NZ.CIWW01000016.1	+	104212	104264	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-198	NZ.CJHG01000016.1	-	39534	39482	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-199	NZ.CIZN01000016.1	-	39537	39485	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-200	NZ.CIYX01000013.1	+	104153	104205	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-201	NZ.CJUX01000016.1	+	104160	104212	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-202	NZ.CIZK01000016.1	+	104178	104230	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-203	NZ.CJGJ01000016.1	+	104143	104195	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-204	NZ.CJMH01000010.1	+	107983	108035	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-205	NZ.CJEM01000015.1	-	39537	39485	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-206	NZ.CJNF01000014.1	-	41507	41455	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-207	NZ.CJUV01000015.1	-	39368	39316	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-208	NZ.CJDU01000016.1	+	104148	104200	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-209	NZ.CJYQ01000013.1	-	39538	39486	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-210	NZ.CJJP01000019.1	+	43218	43270	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-211	NZ.CJHF01000015.1	+	103990	104042	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-212	NZ.CJTZ01000015.1	+	107417	107469	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-213	NZ.CJQQ01000016.1	-	39601	39549	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-214	NZ.CJWC01000014.1	+	104157	104209	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-215	NZ.CJEM01000016.1	+	104154	104206	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-216	NZ.CILH01000015.1	-	39456	39404	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-217	NZ.CJJQ01000011.1	+	104148	104200	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-218	NZ.CJBW01000017.1	-	39537	39485	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-219	NZ.CJAZ01000015.1	+	103986	104038	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-220	NZ.CEYB01000016.1	-	39569	39517	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-221	NZ.CIXT01000015.1	+	103990	104042	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-222	NZ.CJWE01000015.1	-	41258	41206	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-223	NZ.CJAC01000016.1	-	39524	39472	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-224	NZ.CIYD01000011.1	-	39456	39404	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-225	NZ.CJDQ01000016.1	-	39538	39486	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-226	NZ.CJEY01000003.1	+	104147	104199	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-227	NZ.CJEV01000016.1	-	39535	39483	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-228	NZ.CJFU01000014.1	+	104165	104217	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-229	NZ.CJFQ01000015.1	-	39536	39484	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-230	NZ.CJPT01000015.1	-	39601	39549	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-231	NZ.CJHZ01000015.1	-	39534	39482	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-288-232	NZ.CILT01000015.1	-	41673	41621	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-233	NZ.CJTS01000014.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-234	NZ.CJBY01000016.1	+	104160	104212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-235	NZ.CJKS01000015.1	-	39478	39426	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-236	NZ.CJYU01000015.1	-	44803	44751	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-237	NZ.CJXE01000011.1	+	163323	163375	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-238	NZ.CIWA01000016.1	-	39514	39462	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-239	NZ.CJVL01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-240	NZ.CIZP01000016.1	+	104152	104204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-241	NZ.CJQ01000017.1	+	106102	106154	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-242	NZ.CJEE01000016.1	-	39723	39671	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-243	NZ.CJVY01000015.1	+	104146	104198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-244	NZ.CJQM01000014.1	+	107413	107465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-245	NZ.CEZA01000017.1	+	104146	104198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-246	NZ.CJPZ01000009.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-247	NZ.CIVH01000013.1	+	104201	104253	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-248	NZ.CJEX01000016.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-249	NZ.CJIS01000019.1	+	43848	43900	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-250	NZ.CJQA01000008.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-251	NZ.CJNG01000014.1	-	41511	41459	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-252	NZ.CJGM01000010.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-253	NZ.CJKD01000010.1	-	39361	39309	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-254	NZ.CJWL01000015.1	-	39531	39479	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-255	NZ.CJUQ01000015.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-256	NZ.CJMW01000013.1	+	104152	104204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-257	NZ.CILN01000016.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-258	NZ.CJBJ01000016.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1114	NZ.CIWU01000015.1	+	104119	104171	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-259	NZ.CJGQ01000015.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-260	NZ.CJMC01000015.1	-	41499	41447	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-261	NZ.CIUN01000015.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-262	NZ.CIWR01000015.1	+	104111	104163	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-263	NZ.CIUL01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-264	NZ.CJCG01000016.1	-	39537	39485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-265	NZ.CJMO01000013.1	-	41484	41432	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1115	NZ.CIVO01000015.1	-	41516	41464	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-266	NZ.CJU01000015.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-267	NZ.CJOM01000013.1	+	104141	104193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-268	NZ.CJXC01000017.1	-	39381	39329	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-269	NZ.CIYC01000016.1	+	104218	104270	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-270	NZ.CIUJ01000015.1	-	39505	39453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-271	NZ.CJSA01000015.1	+	104163	104215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-272	NZ.CIWF01000016.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-273	NZ.CJOK01000016.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-274	NZ.CJGV01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-275	NZ.CILE01000015.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-276	NZ.CJYX01000015.1	+	104158	104210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-277	NZ.CJLF01000009.1	+	152651	152703	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-848-1	NZ.AETN01000013.1	-	35207	35155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-278	NZ.CJWF01000015.1	+	104158	104210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-279	NZ.CJNS01000014.1	-	39702	39650	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-280	NZ.CJAY01000015.1	+	104150	104202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-281	NZ.CJIV01000012.1	-	41499	41447	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-852-1	NZ.AESU01000031.1	-	42784	42732	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-282	NZ.CJVH01000013.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-283	NZ.CIWH01000015.1	+	107416	107468	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-284	NZ.CJFL01000015.1	-	39560	39508	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-884-1	NZ.AHUG01000050.1	+	100567	100619	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-285	NZ.CJSY01000015.1	-	41516	41464	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-286	NZ.CJXS01000009.1	-	39558	39506	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-287	NZ.CJAL01000014.1	+	104209	104261	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-288	NZ.CJAI01000016.1	+	104143	104195	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-872-1	NZ.AHUE01000073.1	-	45277	45225	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-289	NZ.CJW01000015.1	-	44769	44717	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-290	NZ.CJRX01000010.1	+	141198	141250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-291	NZ.CJVN01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-292	NZ.CJEL01000016.1	-	39723	39671	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-862-1	NZ.APAE01000207.1	-	3173	3121	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-293	NZ.CJCV01000014.1	-	39539	39487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-294	NZ.CJKQ01000015.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-295	NZ.CJYN01000014.1	+	107792	107844	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-296	NZ.CJUY01000015.1	+	104009	104061	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-842-1	NZ.AHIK01000014.1	-	35207	35155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-297	NZ.CJLE01000002.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-298	NZ.CJNN01000003.1	-	68376	68324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-869-1	NZ.AHUB01000025.1	-	4720	4668	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-299	NZ.CJOL01000016.1	-	39377	39325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-300	NZ.CIZJ01000015.1	-	39537	39485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-301	NZ.CJVB01000016.1	+	104163	104215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-892-1	NZ.AYDY01000049.1	+	100567	100619	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-302	NZ.CJXO01000011.1	+	133824	133876	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-303	NZ.CEXQ01000013.1	+	104163	104215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-851-1	NZ.AESQ01000050.1	+	97839	97891	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-304	NZ.CIWW01000015.1	-	39620	39568	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-305	NZ.CIWT01000016.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-888-1	NZ.AJMO01000028.1	-	45069	45017	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-306	NZ.CJCO01000015.1	-	39570	39518	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-307	NZ.CJHW01000016.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-308	NZ.CJVV01000013.1	-	41510	41458	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-873-1	NZ.AHUF01000060.1	-	36249	36197	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-309	NZ.CJMG01000014.1	-	41503	41451	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-875-1	NZ.AHUD01000038.1	+	100524	100576	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-310	NZ.CJCI01000015.1	-	39537	39485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-311	NZ.CJJC01000015.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-890-1	NZ.AYEA01000016.1	-	45273	45221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-312	NZ.CJLL01000015.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-313	NZ.CIZA01000016.1	+	104178	104230	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-867-1	NZ.AYDM01000074.1	+	100113	100165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-314	NZ.CJKP01000013.1	+	107998	108050	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-315	NZ.CJXY01000015.1	+	104164	104216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-855-1	NZ.AOXN01000002.1	-	45077	45025	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-316	NZ.CJPU01000015.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-317	NZ.CJHR01000017.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-318	NZ.CJMD01000013.1	+	107990	108042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-863-1	NZ.APAD01000053.1	-	3017	2965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-319	NZ.CJBX01000015.1	-	39589	39537	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-320	NZ.CJBK01000015.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-321	NZ.CJCK01000016.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-845-1	NZ.AETK01000003.1	+	97841	97893	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1116	NZ.CIY01000014.1	+	104286	104338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-844-1	NZ.AEST01000030.1	+	97733	97785	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-322	NZ.CJLJ01000016.1	+	104043	104095	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-323	NZ.CILP01000015.1	+	107794	107846	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-843-1	NZ.AETW01000044.1	-	35207	35155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-324	NZ.CIYU01000012.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-850-1	NZ.AESOU01000043.1	-	35285	35233	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-325	NZ.CJVC01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-887-1	NZ.AJMN01000011.1	-	45390	45338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-326	NZ.CIWO01000015.1	+	107983	108035	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-883-1	NZ.AHUC01000010.1	+	100542	100594	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-327	NZ.CJFW01000015.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-891-1	NZ.AYDZ01000001.1	-	45273	45221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-860-1	NZ.AYCZ01000097.1	+	97435	97487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-889-1	NZ.AYEB01000069.1	+	93391	93443	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-896-1	NZ.AYEI01000076.1	+	16984	17036	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-847-1	NZ.AETM01000086.1	+	2601	2653	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-874-1	NZ.AHTR01000033.1	-	45077	45025	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-871-1	NZ.AHTQ01000033.1	+	100304	100356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-886-1	NZ.AOGG01000035.1	+	42041	42093	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-858-1	NZ.AOYX01000026.1	+	42042	42094	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-870-1	NZ.AHTP01000001.1	+	100541	100593	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-878-1	NZ.AHTM01000018.1	+	105423	105475	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-894-1	NZ.AOGI01000026.1	+	100031	100083	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-859-1	NZ.AOYW01000025.1	-	35385	35333	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-841-1	NZ.AETV01000024.1	-	35284	35232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-846-1	NZ.AETL01000105.1	-	35284	35232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-861-1	NZ.AYUP01000215.1	-	9770	9718	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-849-1	NZ.AETA01000041.1	-	23926	23874	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-876-1	NZ.AHTL01000005.1	+	105413	105465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-893-1	NZ.AOGJ01000036.1	-	45120	45068	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-266-1	NZ.CCMR01000001.1	+	277430	277482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-880-1	NZ.AHTN01000018.1	-	45387	45335	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-877-1	NZ.AHTO01000001.1	-	45075	45023	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-882-1	NZ.AHTS01000001.1	+	105415	105467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-881-1	NZ.AHTK01000004.1	+	105417	105469	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-885-1	NZ.AOGH01000031.1	+	100387	100439	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-328	NZ.CJVG01000014.1	-	44930	44878	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-329	NZ.CJMP01000015.1	-	41498	41446	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-330	NZ.CJSO01000015.1	-	41513	41461	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-331	NZ.CJIO01000014.1	+	105490	105542	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-853-1	NZ.AESR01000011.1	-	35207	35155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-879-1	NZ.AHTJ01000074.1	-	45390	45338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-857-1	NZ.AOYT01000022.1	-	45150	45098	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-332	NZ.CJOB01000016.1	+	104145	104197	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-333	NZ.CJIE01000017.1	+	104161	104213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-334	NZ.CJIH01000014.1	+	104152	104204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-335	NZ_CJMJ01000009.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-336	NZ_CIXA01000011.1	-	39556	39504	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-337	NZ_CIXR01000016.1	-	39529	39477	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-338	NZ_CJXK01000010.1	-	39378	39326	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-339	NZ_CJDM01000016.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-340	NZ_CJMJ01000015.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-341	NZ_CJAG01000017.1	-	39532	39480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-342	NZ_CJIA01000015.1	+	104146	104198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-343	NZ_CJIB01000016.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-344	NZ_CJLV01000015.1	-	41505	41453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-345	NZ_CJFN01000016.1	-	39558	39506	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-346	NZ_CJDC0100002.1	-	198555	198503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-347	NZ_CJSB01000016.1	+	104174	104226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-348	NZ_CJGZ01000016.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-349	NZ_CJPL01000015.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1117	NZ_CIWJ01000014.1	-	41502	41450	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-350	NZ_CJZD01000016.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-351	NZ_CJW01000014.1	-	39586	39534	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-352	NZ_CJTF01000015.1	-	39367	39315	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-353	NZ_CIVP01000016.1	+	104175	104227	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-354	NZ_CJEH01000016.1	+	104155	104207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-355	NZ_CIYM01000016.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-356	NZ_CJDK01000011.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-357	NZ_CIZL01000011.1	+	137065	137117	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-358	NZ_CJWI01000014.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-359	NZ_CJDN01000015.1	-	39372	39320	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-360	NZ_CJMU01000015.1	+	104152	104204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-361	NZ_CJHB01000016.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-362	NZ_CJTU01000016.1	+	104163	104215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-363	NZ_CJDW01000017.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-364	NZ_CJSW01000016.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-365	NZ_CJQN01000015.1	+	107846	107898	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-305-1	NZ_AUXE01000010.1	-	45181	45129	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-366	NZ_CJPR01000016.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-367	NZ_CJRO01000014.1	-	39552	39500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-368	NZ_CILG01000015.1	-	39576	39524	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-369	NZ_CJOO01000015.1	+	107413	107465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-986-1	NZ_AMDZ02000070.1	+	104391	104443	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-370	NZ_CJSG01000015.1	-	39539	39487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-984-1	NZ_AMED02000023.1	-	45415	45363	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-371	NZ_CJQS01000015.1	-	39556	39504	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-995-1	NZ_AYVJ010000205.1	+	27408	27460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-372	NZ_CJKN01000015.1	+	107411	107463	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-373	NZ_CJDD01000012.1	+	109398	109450	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-970-1	NZ_AOXO01000023.1	+	104435	104487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-374	NZ_CJCD01000016.1	+	104152	104204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-972-1	NZ_AJTU01000006.1	+	145115	145167	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-375	NZ_CJHD01000016.1	-	39723	39671	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-987-1	NZ_AMEA02000019.1	-	45415	45363	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-376	NZ_CJIX01000014.1	-	41505	41453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-977-1	NZ_AMEE02000078.1	+	106171	106223	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-377	NZ_CJDA01000014.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-978-1	NZ_AMEF02000109.1	-	45424	45372	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-989-1	NZ_AERV01000009.1	+	104113	104165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-378	NZ_CJKU01000014.1	+	107993	108045	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-379	NZ_CJCC01000015.1	+	104226	104278	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-980-1	NZ_AMDY01000201.1	+	104301	104353	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-380	NZ_CJGS01000015.1	-	39567	39515	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-998-1	NZ_AOXX01000345.1	-	38141	38089	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-976-1	NZ_AMDX02000028.1	-	45307	45255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-982-1	NZ_AMEC02000007.1	+	104391	104443	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-983-1	NZ_AMEH02000005.1	+	2211	2263	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-974-1	NZ_AOXD01000071.1	+	69832	69884	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1023-1	NZ_AOXM01000017.1	+	17636	17688	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-997-1	NZ_AOXM01000219.1	-	37004	36952	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-981-1	NZ_AMEB02000038.1	+	106171	106223	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-979-1	NZ_AMEG02000182.1	-	45307	45255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-15	NZ_CQGX01000017.1	-	45178	45126	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-16	NZ_CQHG01000017.1	-	45269	45217	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-17	NZ_CQHN01000015.1	-	47295	47243	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-975-1	NZ_AUVE01000010.1	-	45181	45129	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-304-1	NZ_AUVD01000058.1	-	45077	45025	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-994-1	NZ_AYUO01000004.1	+	57838	57890	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-18	NZ_CQGT01000017.1	+	42541	42593	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-19	NZ_CQHH01000015.1	-	45254	45202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-20	NZ_CQGZ01000017.1	+	42532	42584	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-21	NZ_CQHR01000015.1	-	45343	45291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-22	NZ_CQJ01000016.1	-	45252	45200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-23	NZ_CQHD01000016.1	-	45196	45144	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-24	NZ_CQGM01000018.1	-	45252	45200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-25	NZ_CQGO01000016.1	+	42519	42571	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-26	NZ_CQHW01000017.1	-	45178	45126	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-302-1	NZ_AHVA01000016.1	+	104730	104782	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-985-1	NZ_ATWR01000081.1	+	107605	107657	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-27	NZ_CQHC01000015.1	+	42549	42601	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-28	NZ_CQGG01000019.1	-	45254	45202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-29	NZ_CQHA01000015.1	+	42549	42601	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-303-1	NZ_AHUZ01000016.1	+	104759	104811	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-381	NZ_CIVR01000009.1	-	39382	39330	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-382	NZ_CJNX01000014.1	-	41232	41180	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-383	NZ_CJLY01000015.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-384	NZ_CJPW01000010.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-385	NZ_CEZM01000016.1	-	39537	39485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-386	NZ_CJHQ01000017.1	-	39537	39485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-387	NZ_CEXK01000015.1	-	39680	39628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-388	NZ_CIWG01000014.1	+	104159	104211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-389	NZ_CINK01000011.1	-	44769	44717	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-390	NZ_CJOT01000015.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-391	NZ_CJIT01000010.1	-	39562	39510	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-392	NZ_CJFD01000013.1	-	39574	39522	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-393	NZ_CJYH01000004.1	-	216848	216796	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-394	NZ_CJCT01000016.1	+	104146	104198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-395	NZ_CJFK01000013.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-396	NZ_CJKF01000007.1	+	189409	189461	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-397	NZ_CILW01000010.1	-	39540	39488	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-398	NZ_CIYJ01000011.1	+	137633	137685	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-399	NZ_CJBA01000015.1	-	39566	39514	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-400	NZ_CIVL01000015.1	-	39544	39492	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-401	NZ_CJDV01000016.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-402	NZ_CJVE01000015.1	+	104132	104184	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-403	NZ_CJYL01000014.1	-	41510	41458	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-404	NZ_CJIZ01000020.1	-	39374	39322	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-405	NZ_CJFX01000013.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-406	NZ_CIXL01000015.1	-	39556	39504	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-407	NZ_CZXC01000016.1	+	104161	104213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-408	NZ_CEXH01000014.1	+	103992	104044	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-409	NZ_CJEG01000016.1	-	39652	39600	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-410	NZ_CJUB01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-411	NZ_CJUV01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-412	NZ_CIWP01000016.1	+	104141	104193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-413	NZ_CJVJ01000017.1	-	39377	39325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-414	NZ_CJUW01000012.1	-	39355	39303	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-415	NZ_CJPE01000016.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-416	NZ_CIWE01000016.1	+	103936	103988	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-417	NZ_CIYW01000008.1	+	170860	170912	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-418	NZ_CJXX01000017.1	-	39362	39310	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-419	NZ_CIUM01000014.1	-	39585	39533	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-420	NZ_CJOC01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-421	NZ_CJGD01000016.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-422	NZ_CIVM01000016.1	-	39382	39330	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-423	NZ_CJTR01000016.1	+	104150	104202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-424	NZ_CIUW01000015.1	+	107419	107471	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-425	NZ_CJND01000015.1	+	107419	107471	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-426	NZ_CJKL01000011.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-427	NZ_CIWS01000015.1	+	104216	104268	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-428	NZ_CJRT01000016.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-429	NZ_CJPD01000014.1	-	41228	41176	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-430	NZ_CIXX01000022.1	+	43222	43274	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-431	NZ_CIWX01000016.1	-	39527	39475	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-432	NZ_CJLS01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-433	NZ_CJBM01000016.1	+	104179	104231	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-434	NZ_CJTA01000015.1	-	39577	39525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-435	NZ_CJJT01000014.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-436	NZ_CJPM01000016.1	-	39383	39331	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-437	NZ_CJBF01000011.1	+	141125	141177	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-438	NZ_CJJI01000002.1	+	405136	405188	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-439	NZ_CJIU01000013.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-440	NZ_CJJM01000014.1	-	41506	41454	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-441	NZ_CJEF01000016.1	+	104145	104197	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-442	NZ_CJAW01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-443	NZ_CJYK01000014.1	-	39370	39318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-444	NZ_CJWN01000016.1	+	104145	104197	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-445	NZ_CJSF01000017.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-446	NZ_CJHO01000016.1	+	104160	104212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-447	NZ_CJYG01000015.1	-	41672	41620	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-448	NZ_CJDX01000017.1	-	39584	39532	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-449	NZ.CJLM01000015.1	+	103992	104044	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-450	NZ.CJXR01000015.1	-	39382	39330	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-451	NZ.CILF01000016.1	-	39530	39478	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-452	NZ.CJSC01000016.1	-	39549	39497	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-453	NZ.CJJV01000011.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-454	NZ.CIUO01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-455	NZ.CIVD01000014.1	-	41227	41175	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-456	NZ.CJVZ01000016.1	-	39363	39311	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-457	NZ.CJQH01000016.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-458	NZ.CJGB01000016.1	+	104179	104231	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-459	NZ.CJUZ01000013.1	+	107861	107913	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-460	NZ.CIZF01000016.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-461	NZ.CJFH01000017.1	-	39663	39611	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-462	NZ.CJVU01000016.1	+	104011	104063	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-463	NZ.CJIC01000016.1	+	104142	104194	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-464	NZ.CJQ01000013.1	+	107705	107757	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-465	NZ.CJFT01000016.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-466	NZ.CJGF01000016.1	-	39538	39486	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-467	NZ.CJSP01000016.1	+	104164	104216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-468	NZ.CIWY01000011.1	-	39583	39531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-469	NZ.CIXJ01000016.1	-	39527	39475	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-426-1	NZ.AOZW01000064.1	+	84250	84302	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-470	NZ.CJSS01000016.1	-	39373	39321	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-471	NZ.CJXZ01000017.1	-	39540	39488	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-428-1	NZ.APAA01000073.1	+	98899	98951	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-472	NZ.CJHC01000016.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-18-1	NZ.AUXR01000014.1	+	105391	105443	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-473	NZ.CJAV01000016.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-95-1	NZ.JMMF01000016.1	+	103451	103503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-474	NZ.CJSN01000016.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-475	NZ.CJN01000016.1	+	104130	104182	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-41-1	NZ.JMMI01000001.1	+	55530	55582	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-476	NZ.CJHV01000015.1	+	103986	104038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-397-1	NZ.CARQ01000039.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-477	NZ.CJTG01000016.1	+	104155	104207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-478	NZ.CJFG01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-410-1	NZ.CARG01000040.1	-	37550	37498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-479	NZ.CJGT01000015.1	-	39574	39522	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-415-1	NZ.CARB01000036.1	-	37553	37501	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-480	NZ.CJFR01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-422-1	NZ.AYDL01000045.1	+	111493	111545	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-481	NZ.CJSZ01000014.1	+	107858	107910	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-482	NZ.CJXM01000010.1	-	39370	39318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-418-1	NZ.AYDV01000082.1	+	111737	111789	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-434-1	NZ.AOZN01000010.1	+	40589	40641	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-483	NZ.CJDH01000017.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-484	NZ.CJNO01000014.1	-	41507	41455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-113-2	NZ.AOZO01000047.1	+	104627	104679	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-485	NZ.CJME01000017.1	+	107419	107471	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-435-1	NZ.AOZT01000071.1	+	104272	104324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-486	NZ.CJNB01000013.1	-	41505	41453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-406-1	NZ.AOZU01000014.1	-	37534	37482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-487	NZ_CIVQ01000014.1	+	108011	108063	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-404-1	NZ_AOZY01000035.1	+	101428	101480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-488	NZ_CJJO01000016.1	+	104159	104211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1118	NZ_CIXY01000014.1	-	39556	39504	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-432-1	NZ_ALPN01000011.1	-	45077	45025	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-489	NZ_CJXP01000009.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-425-1	NZ_ANOS01000058.1	+	37363	37415	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-490	NZ_CJZF01000016.1	-	39578	39526	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-491	NZ_CIYG01000016.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-395-1	NZ_CARR01000042.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-492	NZ_CJOW01000016.1	-	39706	39654	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-400-1	NZ_CARN01000056.1	+	61476	61528	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-401-1	NZ_CARM01000014.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-409-1	NZ_CATS01000038.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-414-1	NZ_CARCO1000038.1	+	110915	110967	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-421-1	NZ_AYDK01000018.1	+	47113	47165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-402-1	NZ_AYCU01000016.1	-	37792	37740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-437-1	NZ_AOZR01000102.1	-	45537	45485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-416-1	NZ_AOZX01000052.1	+	111713	111765	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-439-1	NZ_CQPO01000009.1	+	138562	138614	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-439-2	NZ_CQPH01000012.1	-	45285	45233	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-439-3	NZ_CQPJ01000008.1	+	138584	138636	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-16-1	NZ_ARYP01000011.1	+	98887	98939	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-19-1	NZ_ARYO01000080.1	-	45140	45088	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-49-1	NZ_JMMM01000017.1	+	103448	103500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-439-4	NZ_CQPB01000009.1	+	106471	106523	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-439-5	NZ_CQPG01000014.1	-	45583	45531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-21-1	NZ_JMMK01000030.1	+	103456	103508	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-31-1	NZ_JMMH01000008.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-493	NZ_CJHN01000016.1	+	104144	104196	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-494	NZ_CJOZ01000016.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-495	NZ_CJYV01000015.1	-	41680	41628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-496	NZ_CJW01000014.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-497	NZ_CELU01000016.1	+	104133	104185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-498	NZ_CEYE01000016.1	-	39723	39671	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-499	NZ_CEXO01000017.1	-	39595	39543	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-500	NZ_CITF01000015.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-501	NZ_CIRA01000016.1	-	39572	39520	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-502	NZ_CIUE0100002.1	+	404999	405051	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-503	NZ_CIPP01000016.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-504	NZ_CIOU01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-505	NZ_CIPY01000009.1	-	39541	39489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-506	NZ_CIRH01000015.1	+	104027	104079	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-507	NZ_CIOJ01000016.1	-	39368	39316	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-508	NZ_CIRB01000014.1	+	104160	104212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-509	NZ_CIST01000013.1	-	41228	41176	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-510	NZ_CIQL01000015.1	+	104145	104197	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-511	NZ_CIQU01000004.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-512	NZ_CITE01000014.1	+	103992	104044	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-513	NZ_CITH01000016.1	-	39543	39491	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-514	NZ_CJBV01000015.1	+	104159	104211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-515	NZ_CITO01000014.1	-	39380	39328	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-516	NZ.CJLW01000014.1	+	104151	104203	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-517	NZ.CISW01000015.1	+	104138	104190	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-518	NZ.CIYO01000014.1	+	107981	108033	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-519	NZ.CIRU01000011.1	-	39576	39524	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-520	NZ.CJTB01000016.1	+	104163	104215	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-521	NZ.CITL01000016.1	+	103986	104038	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-522	NZ.CIXC01000010.1	-	39454	39402	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-523	NZ.CIPR01000014.1	+	109634	109686	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-524	NZ.CJID01000016.1	+	104149	104201	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-525	NZ.CITK01000013.1	-	41230	41178	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-526	NZ.CINW01000014.1	+	104151	104203	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-527	NZ.CJZB01000016.1	-	39372	39320	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-528	NZ.CIRT01000010.1	-	39560	39508	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-529	NZ.CJCU01000016.1	-	39534	39482	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-530	NZ.CITT01000013.1	+	107996	108048	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-531	NZ.CIVN01000015.1	-	39383	39331	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-532	NZ.CIQA01000015.1	+	104162	104214	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-533	NZ.CJFF01000015.1	+	103990	104042	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-534	NZ.CIMW01000015.1	-	41230	41178	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-535	NZ.CIYV01000016.1	+	104156	104208	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-536	NZ.CISA01000015.1	-	39573	39521	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-537	NZ.CJUL01000015.1	+	104157	104209	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-538	NZ.CITS01000016.1	-	39579	39527	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-539	NZ.CITW01000013.1	-	41231	41179	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-540	NZ.CJMY01000013.1	+	107986	108038	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-541	NZ.CEXI01000016.1	-	39535	39483	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-542	NZ.CJNJ01000013.1	-	39536	39484	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-543	NZ.CIOL01000015.1	+	104163	104215	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-544	NZ.CJJJ01000004.1	-	194650	194598	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-545	NZ.CIRQ01000015.1	-	39584	39532	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-546	NZ.CJYJ01000013.1	+	107698	107750	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-547	NZ.CIPF01000015.1	-	39379	39327	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-548	NZ.CIXQ01000016.1	+	104148	104200	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-549	NZ.CIQG01000006.1	+	190326	190378	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-550	NZ.CJWO01000014.1	+	104155	104207	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-551	NZ.CIUB01000015.1	+	104161	104213	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-552	NZ.CIZQ01000010.1	-	41508	41456	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-553	NZ.CIPU01000003.1	-	198388	198336	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-554	NZ.CIYK01000016.1	-	39723	39671	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-555	NZ.CINV01000016.1	-	39601	39549	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-556	NZ.CJOQ01000014.1	+	107408	107460	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-557	NZ.CISJ01000014.1	+	103990	104042	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-558	NZ.CEYC01000016.1	+	104161	104213	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-559	NZ.CIVG01000015.1	-	41690	41638	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-560	NZ.CIOK01000016.1	+	104161	104213	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-561	NZ.CJHL01000016.1	+	104140	104192	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-562	NZ.CINF01000015.1	-	39370	39318	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-563	NZ.CJXQ01000011.1	-	39540	39488	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-564	NZ.CIRD01000016.1	-	39569	39517	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-565	NZ.CIPQ01000013.1	+	107862	107914	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-566	NZ.CISQ01000015.1	-	39591	39539	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-567	NZ.CIQV01000016.1	+	104145	104197	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-288-568	NZ.CIQR01000015.1	-	39361	39309	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-569	NZ.CIPT01000015.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-570	NZ.CISD01000015.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-571	NZ.CINU01000015.1	-	39376	39324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-572	NZ.CIPC01000014.1	+	104163	104215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-573	NZ.CIOT01000015.1	+	107419	107471	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-574	NZ.CITA01000014.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-575	NZ.CISH01000015.1	-	39585	39533	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-576	NZ.CIQB01000016.1	-	39591	39539	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-577	NZ.CISF01000015.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-578	NZ.CISS01000014.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-579	NZ.CIPA01000016.1	-	39584	39532	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-580	NZ.CIUA01000014.1	-	39588	39536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-581	NZ.CIPV01000004.1	+	104146	104198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-582	NZ.CION01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-583	NZ.CIPW01000013.1	-	41509	41457	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-584	NZ.CIOX01000006.1	-	39373	39321	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-585	NZ.CINQ01000018.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-586	NZ.CIQK01000016.1	+	104142	104194	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-587	NZ.CIQY01000014.1	+	107419	107471	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-588	NZ.CIOG01000003.1	+	103986	104038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-589	NZ.CITX01000013.1	-	41509	41457	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-590	NZ.CIRZ01000014.1	+	103989	104041	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-591	NZ.CIQM01000016.1	-	39503	39451	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-592	NZ.CITZ01000012.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-811-1	NZ.AETB01000027.1	-	35284	35232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-814-1	NZ.AETE01000046.1	-	35284	35232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-838-1	NZ.AETS01000077.1	-	35207	35155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-831-1	NZ.AHHS01000107.1	+	97829	97881	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-231-1	NZ.LARYT01000025.1	+	101525	101577	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-803-1	NZ.AESV01000060.1	+	97648	97700	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-821-1	NZ.AETG01000061.1	-	35207	35155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-801-1	NZ.AL PQ01000042.1	+	8188	8240	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-826-1	NZ.AESZ01000035.1	-	35284	35232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-807-1	NZ.AETQ01000019.1	+	97839	97891	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-829-1	NZ.AESQ01000056.1	+	97651	97703	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-824-1	NZ.AETH01000095.1	+	97835	97887	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-800-1	NZ.AOYO01000024.1	-	35210	35158	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-819-1	NZ.AESM01000030.1	-	35648	35596	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-808-1	NZ.AESH01000041.1	-	35284	35232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-815-1	NZ.AESI01000032.1	+	97839	97891	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-234-1	NZ.LAHUX01000027.1	+	97706	97758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-827-1	NZ.AOYQ01000006.1	+	97727	97779	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-804-1	NZ.AETO01000003.1	-	35284	35232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-593	NZ.CINB01000016.1	-	39380	39328	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-812-1	NZ.AESX01000043.1	+	98859	98911	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-594	NZ.CIRJ01000011.1	-	39370	39318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-793-1	NZ.AUQI01000090.1	-	37855	37803	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-595	NZ.CJYW01000015.1	-	39580	39528	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-809-1	NZ.AETC01000022.1	-	35310	35258	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-596	NZ.CIWN01000014.1	+	104144	104196	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-818-1	NZ.AESL01000022.1	+	97839	97891	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-597	NZ_CJCA01000015.1	+	104180	104232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-825-1	NZ_AHHR01000028.1	-	35284	35232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-598	NZ_CJWH01000016.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-832-1	NZ_AHHT01000024.1	-	35284	35232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-599	NZ_CJST01000016.1	+	104158	104210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-823-1	NZ_AETF01000059.1	-	35284	35232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-600	NZ_CJGA01000013.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-840-1	NZ_AETU01000084.1	-	35207	35155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-601	NZ_CJNP01000015.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-839-1	NZ_AETT01000012.1	-	35208	35156	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-602	NZ_CJGY01000016.1	+	104142	104194	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-603	NZ_CINP01000009.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-798-1	NZ_AOYN01000139.1	-	45480	45428	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-604	NZ_CIQH01000013.1	+	107423	107475	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-799-1	NZ_AOYS01000026.1	-	40814	40762	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-605	NZ_CJIN01000016.1	+	104146	104198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-606	NZ_CILJ01000015.1	-	39365	39313	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-794-1	NZ_APAN01000075.1	+	100234	100286	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-607	NZ_CJXX01000014.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-805-1	NZ_AETP01000016.1	-	35207	35155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-608	NZ_CJTV01000016.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-810-1	NZ_AETD01000015.1	+	97636	97688	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-609	NZ_CJFM01000016.1	+	104015	104067	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-816-1	NZ_AESJ01000001.1	+	97835	97887	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-610	NZ_CJDL01000016.1	+	104150	104202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-822-1	NZ_AETJ01000084.1	-	35207	35155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-611	NZ_CJGW01000016.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-797-1	NZ_AOYR01000043.1	-	37499	37447	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-612	NZ_CJXX01000016.1	-	39711	39659	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-613	NZ_CIWC01000015.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-614	NZ_CJPI01000016.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-795-1	NZ_APAL01000294.1	-	2980	2928	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-615	NZ_CJPC01000016.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-616	NZ_CJPQ01000015.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-830-1	NZ_AYUN01000226.1	-	4846	4794	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-617	NZ_CJJA01000014.1	-	41503	41451	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-820-1	NZ_AESN01000032.1	+	79699	79751	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-618	NZ_CIVY01000014.1	-	41526	41474	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-619	NZ_CIKZ01000013.1	+	104165	104217	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-796-1	NZ_AMRS01000013.1	-	37964	37912	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-835-1	NZ_AHHW01000009.1	+	95080	95132	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-620	NZ_CISK01000005.1	-	198400	198348	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-621	NZ_CIQC01000013.1	+	104161	104213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-837-1	NZ_AETR01000029.1	+	97844	97896	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-622	NZ_CIPM01000001.1	-	39375	39323	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-836-1	NZ_JMMJ01000005.1	-	28770	28718	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-623	NZ_CEWV01000016.1	-	39533	39481	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-624	NZ_CILD01000015.1	+	104049	104101	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-625	NZ_CJRV01000010.1	-	39557	39505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-828-1	NZ_AESS01000101.1	+	73609	73661	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-806-1	NZ_AESW01000001.1	+	97696	97748	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-626	NZ_CJNA01000014.1	-	41509	41457	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-627	NZ_CING01000015.1	+	104008	104060	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-792-1	NZ_AOYZ01000072.1	-	37522	37470	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-628	NZ_CIUQ01000016.1	-	39541	39489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-834-1	NZ_AHHV01000035.1	+	97838	97890	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-629	NZ_CIUP01000015.1	+	108000	108052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-791-1	NZ_AHUU01000022.1	+	110824	110876	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-630	NZ_CJBC01000016.1	-	39766	39714	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-631	NZ_CJRS01000015.1	-	39549	39497	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-817-1	NZ_AESK01000040.1	-	35284	35232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-833-1	NZ_AHHU01000014.1	+	97835	97887	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-632	NZ_CJUF01000016.1	-	39702	39650	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-633	NZ_CITD01000015.1	-	39586	39534	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-634	NZ_CIQI01000003.1	+	104147	104199	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-635	NZ_CJXU01000016.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-636	NZ_CJCB01000014.1	-	39572	39520	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-637	NZ_CJSI01000014.1	+	107419	107471	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-638	NZ_CJEN01000016.1	+	104147	104199	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-639	NZ_CIZT01000016.1	+	104159	104211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-640	NZ_CJWB01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-641	NZ_CJFZ01000016.1	-	39537	39485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-642	NZ_CJL01000015.1	-	39562	39510	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-643	NZ_CIXB01000015.1	-	39614	39562	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-644	NZ_CJWY01000016.1	+	104160	104212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-645	NZ_CJTC01000016.1	-	39383	39331	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-646	NZ_CJWJ01000015.1	-	39363	39311	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-647	NZ_CJNT01000013.1	+	107992	108044	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-648	NZ_CJGX01000014.1	-	39575	39523	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-649	NZ_CILR01000015.1	+	109294	109346	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-650	NZ_CJCH01000015.1	-	39573	39521	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-651	NZ_CIZW01000016.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-652	NZ_CJRU01000015.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-653	NZ_CJFE01000016.1	+	104137	104189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-654	NZ_CJAP01000017.1	-	39539	39487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-655	NZ_CJKO01000009.1	+	133799	133851	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-656	NZ_CJJS01000013.1	-	41505	41453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-657	NZ_CJAJ01000016.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-658	NZ_CJTW01000015.1	-	41512	41460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-659	NZ_CJNL01000015.1	+	104158	104210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-660	NZ_CJNU01000016.1	-	39708	39656	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-661	NZ_CJHH01000013.1	-	39563	39511	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-662	NZ_CJDO01000014.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-663	NZ_CJSQ01000016.1	-	39361	39309	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-664	NZ_CJDE01000014.1	+	107811	107863	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-665	NZ_CIXS01000016.1	+	104124	104176	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-666	NZ_CIXH01000014.1	+	104249	104301	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-667	NZ_CJHX01000015.1	-	39530	39478	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-668	NZ_CJEA01000016.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-669	NZ_CJFI01000015.1	-	39532	39480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-670	NZ_CJQL01000016.1	+	104172	104224	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-671	NZ_CJKR01000015.1	+	104124	104176	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-672	NZ_CJHS01000016.1	+	104160	104212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-673	NZ_CJKC01000013.1	+	104143	104195	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-674	NZ.CIVA01000015.1	-	39386	39334	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-675	NZ.CJPG01000008.1	+	159488	159540	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-676	NZ.CJTX01000015.1	-	39371	39319	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-677	NZ.CJOA01000016.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-678	NZ.CJEW01000016.1	-	39532	39480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-679	NZ.CJZA01000016.1	-	39540	39488	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-680	NZ.CJXN01000015.1	+	103986	104038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-681	NZ.CJWM01000014.1	+	104141	104193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-682	NZ.CJEC01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-683	NZ.CJCN01000015.1	-	39538	39486	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-684	NZ.CJOU01000016.1	+	104172	104224	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-685	NZ.CJKW01000011.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-686	NZ.CJCR01000016.1	-	39597	39545	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-687	NZ.CJVS01000016.1	-	39366	39314	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-688	NZ.CJES01000016.1	+	104133	104185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-689	NZ.CJXN01000017.1	+	104165	104217	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-690	NZ.CIZG01000016.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-691	NZ.CJCY01000013.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-692	NZ.CJNM01000012.1	-	41512	41460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-693	NZ.CIOP01000015.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-694	NZ.CITB01000013.1	-	39583	39531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-695	NZ.CIRE01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-696	NZ.CIRP01000016.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-697	NZ.CIQQ01000014.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-698	NZ.CIRY01000014.1	+	103989	104041	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-699	NZ.CITG01000015.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-700	NZ.CIPO01000007.1	+	170843	170895	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-701	NZ.CIPX01000015.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-702	NZ.CITY01000015.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-703	NZ.CIRG01000002.1	-	198392	198340	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-704	NZ.CINL01000015.1	-	39382	39330	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-705	NZ.CITV01000013.1	+	107862	107914	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-706	NZ.CIOV01000014.1	+	104206	104258	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-707	NZ.CIOI01000016.1	+	104160	104212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-708	NZ.CISM01000014.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-709	NZ.CIRR01000008.1	+	152660	152712	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-710	NZ.CISE01000014.1	+	104134	104186	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-711	NZ.CIPB01000016.1	+	104163	104215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-712	NZ.CILB01000015.1	+	104166	104218	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-713	NZ.CIQD01000016.1	+	104150	104202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-714	NZ.CITC01000015.1	-	39574	39522	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-715	NZ.CISO01000015.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-716	NZ.CIQN01000016.1	+	104152	104204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-717	NZ.CIQX01000015.1	-	39367	39315	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-718	NZ.CIRF01000016.1	-	39361	39309	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-719	NZ.CIOF01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-720	NZ.CIUG01000016.1	+	104161	104213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-721	NZ.CISX01000014.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-722	NZ.CITJ01000014.1	-	39374	39322	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-723	NZ.CIOR01000014.1	+	104163	104215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-724	NZ.CILA01000011.1	-	39571	39519	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-725	NZ.CIRW01000015.1	+	104133	104185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-726	NZ_CIRL01000015.1	-	39588	39536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-727	NZ_CISV01000015.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-728	NZ_CINO01000016.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-729	NZ_CINT01000015.1	-	39589	39537	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-730	NZ_CIZU01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-731	NZ_CIUFO1000015.1	+	104167	104219	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-732	NZ_CJQC01000008.1	+	152693	152745	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-733	NZ_CJON01000014.1	-	39844	39792	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-734	NZ_CJZE01000016.1	-	39361	39309	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-735	NZ_CJUR01000016.1	-	39365	39313	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-736	NZ_CJSR01000015.1	+	104161	104213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-737	NZ_CJTT01000014.1	+	107817	107869	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-738	NZ_CJUC01000015.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-739	NZ_CIVZ01000016.1	-	39549	39497	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-740	NZ_CJMM01000014.1	+	107827	107879	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-741	NZ_CIVJ01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-742	NZ_CJCX01000016.1	+	104152	104204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-743	NZ_CJYJ01000015.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-744	NZ_CJJB01000015.1	+	107662	107714	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-745	NZ_CJOG01000016.1	-	39541	39489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-746	NZ_CJGN01000016.1	-	39537	39485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-747	NZ_CJGI01000002.1	+	405531	405583	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-748	NZ_CJMV01000003.1	-	216953	216901	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-749	NZ_CJTP01000015.1	+	107862	107914	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-750	NZ_CJOF01000016.1	+	104155	104207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-751	NZ_CJLR01000015.1	+	104138	104190	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-752	NZ_CJHJ01000016.1	-	39532	39480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-753	NZ_CJHP01000015.1	-	39723	39671	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-754	NZ_CIXZ01000015.1	+	104219	104271	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-755	NZ_CJJZ01000016.1	+	104142	104194	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-756	NZ_CJCE01000015.1	+	103986	104038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-757	NZ_CIVC01000015.1	+	104178	104230	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-758	NZ_CJFO01000016.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-759	NZ_CIZV01000016.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-760	NZ_CJYD01000009.1	+	163325	163377	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-761	NZ_CJRR01000014.1	+	108666	108718	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-762	NZ_CIUUV01000016.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-763	NZ_CJNI01000015.1	+	104158	104210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-764	NZ_CJJK01000003.1	+	103208	103260	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-765	NZ_CJXP01000016.1	+	104184	104236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-766	NZ_CJJD01000014.1	+	108006	108058	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-767	NZ_CJEQ01000016.1	+	104150	104202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-768	NZ_CJKZ01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-769	NZ_CJYS01000016.1	+	104159	104211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-770	NZ_CJSX01000016.1	+	104016	104068	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-771	NZ_CJBZ01000016.1	+	104158	104210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-772	NZ_CJOX01000015.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-773	NZ_CJFA01000015.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-774	NZ_CIYH01000015.1	+	104203	104255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-775	NZ_CJTL01000016.1	-	39371	39319	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-776	NZ_CJWA01000015.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-777	NZ_CJUO01000016.1	+	104155	104207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-778	NZ.CJPB01000015.1	-	39706	39654	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-779	NZ.CIWQ01000015.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-780	NZ.CJKH01000010.1	+	152666	152718	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-781	NZ.CJFP01000015.1	-	39531	39479	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-782	NZ.CEYH01000016.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-783	NZ.CEZU01000016.1	+	104138	104190	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-784	NZ.CEXJ01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-785	NZ.CIZC01000015.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-786	NZ.CJYO01000012.1	+	107743	107795	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-787	NZ.CJQW01000015.1	-	39388	39336	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-788	NZ.CJTM01000016.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-789	NZ.CJPP01000015.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-790	NZ.CJMS01000003.1	-	200080	200028	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-791	NZ.CJVO01000016.1	-	39365	39313	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-792	NZ.CILIO1000008.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-793	NZ.CJLN01000002.1	+	405306	405358	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-794	NZ.CIYZ01000016.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-795	NZ.CJRQ01000008.1	-	39557	39505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-796	NZ.CIYZ01000015.1	+	104053	104105	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-797	NZ.CJGH01000014.1	-	39583	39531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-798	NZ.CJKG01000006.1	+	182313	182365	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-799	NZ.CJKM01000010.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-800	NZ.CIXG01000015.1	-	39565	39513	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-801	NZ.CJIR01000019.1	-	39361	39309	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-802	NZ.CJDS01000012.1	+	107993	108045	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-803	NZ.CJAT01000015.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-804	NZ.CJJP01000002.1	-	198048	197996	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-805	NZ.CJTH01000015.1	-	41512	41460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-806	NZ.CJBG01000015.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-807	NZ.CJRY01000016.1	-	39506	39454	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1119	NZ.CILC01000016.1	+	104213	104265	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-808	NZ.CJDJ01000015.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-809	NZ.CIZI01000015.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-810	NZ.CJYB01000016.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-811	NZ.CIVIO1000014.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-812	NZ.CJAM01000016.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-813	NZ.CJOP01000016.1	-	39383	39331	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-814	NZ.CJPJ01000017.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-815	NZ.CJQR01000015.1	-	39561	39509	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-816	NZ.CJTO01000016.1	-	39371	39319	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-817	NZ.CJMF01000013.1	-	41498	41446	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-818	NZ.CJET01000016.1	+	104147	104199	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-819	NZ.CEXP01000016.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-820	NZ.CIYA01000015.1	-	39556	39504	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-821	NZ.CJCQ01000016.1	-	39540	39488	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-822	NZ.CJHI01000016.1	-	39537	39485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-823	NZ.CJXL01000017.1	-	39552	39500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-824	NZ.CIXW01000015.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-825	NZ.CJYR01000014.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-826	NZ.CJDI01000015.1	-	39582	39530	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-827	NZ.CJMT01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-828	NZ.CJAK01000014.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-829	NZ_CIVK01000013.1	-	39506	39454	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-830	NZ_CJWP01000003.1	-	198560	198508	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-131-1	NZ_LIMK01000047.1	-	7856	7804	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-114-1	NZ_AZKO02000007.1	+	14026	14078	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-119-1	NZ_AZLA01000036.1	-	14715	14663	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-439-6	NZ_CQPF01000014.1	-	45175	45123	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-136-1	NZ_AYUE01000015.1	+	21280	21332	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-126-1	NZ_AZLB01000007.1	-	37541	37489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-439-7	NZ_CQPI01000012.1	-	45367	45315	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-449-1	NZ_AYVC01000013.1	-	36680	36628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-443-1	NZ_AYVH01000013.1	-	5782	5730	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-465-1	NZ_AOZH01000025.1	-	19515	19463	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-831	NZ_CIOO01000013.1	+	107861	107913	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-441-1	NZ_AOZM01000038.1	+	34562	34614	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-832	NZ_CIQJ01000015.1	+	104150	104202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-833	NZ_CIQW01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-471-1	NZ_APAF01000259.1	-	8143	8091	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-834	NZ_CIUUK01000013.1	-	44930	44878	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-442-1	NZ_APAP01000035.1	-	45429	45377	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-835	NZ_CIMZ01000012.1	+	107813	107865	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-127-1	NZ_AZKQ02000008.1	+	18889	18941	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-439-8	NZ_CQPK01000013.1	-	15585	15533	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-836	NZ_CIQF01000016.1	-	39576	39524	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-439-9	NZ_CQPE01000017.1	-	45348	45296	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-837	NZ_CIOS01000015.1	+	104160	104212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-838	NZ_CITN01000009.1	-	39370	39318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-464-1	NZ_ATEU01000051.1	-	45254	45202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-839	NZ_CINN01000015.1	+	104181	104233	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-448-1	NZ_AYVD01000012.1	+	95202	95254	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-840	NZ_CIQO01000015.1	-	39538	39486	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-469-1	NZ_AHJ01000005.1	-	49367	49315	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-841	NZ_CINC01000016.1	+	104014	104066	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-444-1	NZ_AOZJ01000055.1	-	36680	36628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-842	NZ_CIOW01000015.1	-	39541	39489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-445-1	NZ_AYVG01000011.1	+	95203	95255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-843	NZ_CISP01000015.1	-	39580	39528	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-844	NZ_CITM01000016.1	-	39541	39489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-461-1	NZ_AOZI01000030.1	+	97354	97406	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-845	NZ_CIOH01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-125-1	NZ_AZKU01000012.1	-	14715	14663	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-124-1	NZ_AZKT01000038.1	-	37597	37545	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-846	NZ_CIOE01000015.1	+	107384	107436	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-121-1	NZ_AZKV01000024.1	+	97957	98009	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-847	NZ_CIRI01000016.1	-	39564	39512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-848	NZ_CISZ01000015.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-118-1	NZ_AZKZ01000037.1	+	104477	104529	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-849	NZ_CISU01000014.1	-	41249	41197	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-123-1	NZ_AZKS01000081.1	-	11432	11380	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-850	NZ_CIPL01000016.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-117-1	NZ_AZKY01000039.1	+	14027	14079	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-851	NZ_CIOM01000017.1	-	39569	39517	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-115-1	NZ_AZKW01000008.1	-	45095	45043	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-852	NZ_CIPG01000014.1	-	44758	44706	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-853	NZ_CISC01000015.1	-	39589	39537	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-439-10	NZ_CQPN01000012.1	-	45266	45214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-854	NZ_CIOB01000018.1	+	107995	108047	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
Sen-288-855	NZ_CIND01000016.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-856	NZ_CJRI01000013.1	+	104161	104213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-857	NZ_CIPK01000016.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-453-1	NZ_AYUY01000011.1	+	95202	95254	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-858	NZ_CIPZ01000010.1	+	104165	104217	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-128-1	NZ_AZKP01000048.1	-	11305	11253	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-447-1	NZ_AYVE01000011.1	+	95203	95255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-859	NZ_CIRC01000015.1	+	104144	104196	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-450-1	NZ_AYVB01000014.1	-	36680	36628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-860	NZ_CIOD01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-861	NZ_CINA01000016.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-862	NZ_CJRC01000015.1	-	41510	41458	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-863	NZ_CIOY01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-120-1	NZ_AZLC01000015.1	+	104477	104529	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-864	NZ_CIOZ01000018.1	+	104178	104230	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-122-1	NZ_AZKR01000018.1	+	18897	18949	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-865	NZ_CISN01000015.1	-	39576	39524	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-116-1	NZ_AZKX01000030.1	+	104479	104531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-866	NZ_CIRV01000014.1	-	39588	39536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-451-1	NZ_AYVA01000013.1	-	36680	36628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-867	NZ_CITQ01000016.1	-	39374	39322	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-456-1	NZ_AYUV01000014.1	-	36603	36551	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-868	NZ_CIQT01000016.1	-	39518	39466	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-457-1	NZ_AYUU01000011.1	-	36680	36628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-869	NZ_CIUD01000012.1	+	107998	108050	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-870	NZ_CIPH01000014.1	-	39541	39489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-467-1	NZ_AHUK01000056.1	-	49403	49351	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-871	NZ_CISI01000014.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-452-1	NZ_AYUZ01000012.1	-	36680	36628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-872	NZ_CIKY01000015.1	+	107851	107903	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-459-1	NZ_AYUS01000043.1	-	268	216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-873	NZ_CIOA01000015.1	+	104165	104217	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-874	NZ_CJRL01000015.1	+	104152	104204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-455-1	NZ_AYUW01000012.1	+	95203	95255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-875	NZ_CIMY01000014.1	+	104030	104082	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-446-1	NZ_AYVF01000014.1	-	36680	36628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-876	NZ_CIQS01000015.1	+	104012	104064	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-458-1	NZ_AYUT01000012.1	-	36680	36628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-877	NZ_CIRM01000008.1	+	133807	133859	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-454-1	NZ_AYUX01000013.1	+	70771	70823	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-878	NZ_CIPF01000015.1	-	39501	39449	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-460-1	NZ_AYUR01000011.1	+	95203	95255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-879	NZ_CINR01000014.1	+	104181	104233	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-880	NZ_CINE01000015.1	-	41673	41621	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-881	NZ_CIPJ01000014.1	-	39537	39485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-882	NZ_CIRK01000012.1	+	107987	108039	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-883	NZ_CJXD01000017.1	+	104163	104215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-884	NZ_CINX01000016.1	-	39596	39544	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-885	NZ.CJCW01000016.1	-	39532	39480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-886	NZ.CIUY01000006.1	-	39383	39331	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1120	NZ.CIYL01000011.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-887	NZ.CJPO01000007.1	+	152696	152748	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-888	NZ.CJHT01000016.1	+	104150	104202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-889	NZ.CJGC01000012.1	+	104169	104221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1121	NZ.CIOC01000014.1	-	41512	41460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-890	NZ.CIUI01000014.1	+	103989	104041	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-891	NZ.CISL01000014.1	+	103990	104042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-892	NZ.CIQP01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-893	NZ.CITU01000014.1	+	107894	107946	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-894	NZ.CIUH01000013.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-895	NZ.CITI01000014.1	-	39588	39536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-896	NZ.CINZ01000016.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-897	NZ.CINS01000015.1	+	104164	104216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-898	NZ.CINH01000015.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-899	NZ.CIQE01000016.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-900	NZ.CIRX01000010.1	+	133852	133904	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-901	NZ.CIQZ01000006.1	-	39370	39318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-902	NZ.CIRO01000014.1	+	104138	104190	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-903	NZ.CISB01000014.1	-	39586	39534	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-904	NZ.CITP01000015.1	-	39549	39497	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-905	NZ.CITR01000003.1	-	198388	198336	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-906	NZ.CINI01000016.1	-	39379	39327	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-907	NZ.CIRS01000017.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-908	NZ.CIPS01000015.1	-	41507	41455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-909	NZ.CIPD01000003.1	+	104158	104210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-910	NZ.CISY01000013.1	-	39584	39532	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-911	NZ.CIUC01000015.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-912	NZ.CIKX01000016.1	+	104173	104225	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-913	NZ.CISG01000015.1	+	103989	104041	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-914	NZ.CIRN01000016.1	-	39588	39536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-915	NZ.CINY01000011.1	+	107828	107880	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-916	NZ.CIMX01000015.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-917	NZ.CISR01000015.1	-	39588	39536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-918	NZ.CIOQ01000015.1	+	104025	104077	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-919	NZ.CINJ01000015.1	-	39388	39336	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-920	NZ.CIPN01000015.1	+	107996	108048	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-921	NZ.CJNC01000013.1	-	41507	41455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-922	NZ.CJLQ01000014.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-923	NZ.CJNV01000007.1	-	41508	41456	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-924	NZ.CJNH01000014.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-925	NZ.CJBB01000016.1	-	39541	39489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-926	NZ.CJDY01000016.1	-	39710	39658	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-927	NZ.CJWS01000016.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-928	NZ.CIYP01000014.1	+	104206	104258	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-929	NZ.CILM01000016.1	-	39357	39305	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-930	NZ.CJNQ01000014.1	-	41499	41447	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1122	NZ.CIWM01000014.1	-	41505	41453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-931	NZ.CJBT01000010.1	+	141195	141247	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-932	NZ.CJLT01000014.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-933	NZ.CJCF01000015.1	+	103986	104038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-934	NZ.CJYC01000017.1	-	44768	44716	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-935	NZ.CIYY01000016.1	+	104137	104189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-936	NZ.CJWD01000016.1	+	104147	104199	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-937	NZ.CJMI01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-938	NZ.CIXF01000016.1	-	39588	39536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-939	NZ.CJBH01000015.1	+	103986	104038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-940	NZ.CJLC01000016.1	+	104109	104161	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-941	NZ.CJXA01000016.1	-	39378	39326	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-315-1	NZ.AHUT01000041.1	+	42411	42463	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-322-1	NZ.CATM01000040.1	+	111239	111291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-327-1	NZ.CATR01000036.1	-	37562	37510	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-332-1	NZ.CATA01000042.1	+	42800	42852	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-338-1	NZ.CASU01000047.1	+	42880	42932	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-316-1	NZ.CATQ01000043.1	+	111287	111339	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-323-1	NZ.CATL01000048.1	+	111226	111278	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-328-1	NZ.CATE01000036.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-334-1	NZ.CASY01000039.1	+	111202	111254	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-335-1	NZ.CASX01000036.1	+	111336	111388	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-339-1	NZ.CAST01000046.1	+	102302	102354	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-9-1	NZ.JGYE01000109.1	+	4194	4246	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-313-1	NZ.AHUS01000028.1	-	45078	45026	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-321-1	NZ.CATN01000044.1	+	111197	111249	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-326-1	NZ.CATF01000034.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-331-1	NZ.CATB01000040.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-337-1	NZ.CASV01000053.1	+	55458	55510	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-320-1	NZ.AYDT01000147.1	+	111582	111634	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-317-1	NZ.CATP01000025.1	+	111848	111900	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-319-1	NZ.CATO01000040.1	+	111150	111202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-324-1	NZ.CATK01000043.1	-	37550	37498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-325-1	NZ.CATJ01000034.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-330-1	NZ.CATC01000039.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-336-1	NZ.CASW01000025.1	+	111111	111163	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-318-1	NZ.AYDU01000103.1	-	37530	37478	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-942	NZ.CXJ01000016.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-943	NZ.CEZQ01000016.1	+	104159	104211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-944	NZ.CJEO01000016.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-945	NZ.CILQ01000012.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-946	NZ.CJNE01000014.1	-	41516	41464	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-947	NZ.CJHM01000016.1	+	104139	104191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-948	NZ.CJLG01000016.1	+	103212	103264	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-949	NZ.CJTJ01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-950	NZ.CIZX01000016.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-951	NZ.CJAX01000016.1	+	104135	104187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-952	NZ.CJPF01000015.1	-	41228	41176	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-953	NZ.CJT01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-954	NZ.CJFV01000016.1	-	39579	39527	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-955	NZ.CJQT01000015.1	+	104170	104222	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-956	NZ.CEYX01000016.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-957	NZ.CIVS01000015.1	+	109396	109448	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-958	NZ.CJJE01000015.1	+	104136	104188	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-959	NZ.CJPK01000008.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-960	NZ.CJAH01000016.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-961	NZ.CIYQ01000011.1	+	116070	116122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-962	NZ.CIXU01000014.1	+	104140	104192	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-963	NZ.CJPS01000013.1	-	39601	39549	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-964	NZ.CJLI01000006.1	-	39456	39404	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-965	NZ.CJTE01000016.1	-	39371	39319	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-966	NZ.CIVU01000016.1	+	104172	104224	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-967	NZ.CJYA01000016.1	-	39456	39404	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-968	NZ.CJHY01000015.1	+	104142	104194	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-969	NZ.CIUW01000016.1	+	104162	104214	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-970	NZ.CIUX01000015.1	+	107419	107471	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-971	NZ.CIZH01000015.1	-	39531	39479	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-972	NZ.CJJR01000013.1	-	41201	41149	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-973	NZ.CJIG01000015.1	-	39560	39508	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-974	NZ.CJMX01000014.1	-	41231	41179	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-975	NZ.CJQY01000016.1	-	39601	39549	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-976	NZ.CJOY01000016.1	-	39706	39654	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-977	NZ.CILU01000016.1	-	39370	39318	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-978	NZ.CJXV01000017.1	-	39374	39322	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-979	NZ.CJAB01000016.1	-	39538	39486	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-980	NZ.CJXT01000016.1	+	104164	104216	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-981	NZ.CIXP01000022.1	-	39353	39301	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-982	NZ.CJTD01000014.1	+	107864	107916	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-983	NZ.CJLO01000014.1	-	41501	41449	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-1123	NZ.CIYN01000015.1	-	39528	39476	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-984	NZ.CJFC01000015.1	+	104157	104209	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-985	NZ.CJWG01000017.1	+	104159	104211	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-986	NZ.CJAR01000014.1	+	104154	104206	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-987	NZ.CJPY01000015.1	+	104172	104224	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-988	NZ.CJZG01000016.1	-	39601	39549	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-989	NZ.CJQO01000015.1	+	104149	104201	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-990	NZ.CJYY01000014.1	+	107837	107889	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-175-1	NZ.AMNI01000018.1	+	43440	43492	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-209-1	NZ.AMNN01000060.1	+	16157	16209	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-204-1	NZ.AMNS01000001.1	-	36301	36249	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-211-1	NZ.AMNJ01000008.1	+	43441	43493	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-200-1	NZ.AMNO01000081.1	-	37603	37551	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-205-1	NZ.AMNT01000032.1	+	25569	25621	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-213-1	NZ.AMNB01000092.1	+	131954	132006	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-212-1	NZ.AMNK01000018.1	-	37498	37446	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-51	NZ.LINK01000004.1	-	9890	9838	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-198-1	NZ.AMNP01000004.1	-	37494	37442	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-52	NZ.LINL01000061.1	+	42496	42548	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-773-1	NZ.AKYL01000049.1	+	100902	100954	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-790-1	NZ.AUQG01000125.1	-	37523	37471	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-788-1	NZ.AUQJ01000078.1	-	37855	37803	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-225-48	NZ.LINR01000022.1	+	61621	61673	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-761-1	NZ.AMBU01000035.1	-	37498	37446	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-170-46	NZ.LIMW01000021.1	-	37518	37466	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-201-1	NZ.AKYN01000107.1	-	37697	37645	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-208-1	NZ.AMMC01000016.1	+	42026	42078	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-306-53	NZ.LIOG01000018.1	-	45387	45335	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-767-1	NZ.AMMT01000186.1	-	37600	37548	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-306-54	NZ.LINM01000005.1	-	45297	45245	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-225-49	NZ.LINO01000036.1	-	37859	37807	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-769-1	NZ.AMMV01000445.1	-	37768	37716	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-207-1	NZ.AMNC01000031.1	+	43443	43495	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-202-1	NZ.AMND01000144.1	-	23081	23029	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-764-1	NZ.AMBX01000018.1	-	37498	37446	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-221-1	NZ.AMLR01000008.1	+	52031	52083	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-5-5	NZ.LIMH01000026.1	-	45667	45615	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-775-1	NZ.AMMJ01000088.1	-	37496	37444	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-47	NZ.LIMR01000020.1	+	100579	100631	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-215-1	NZ.AMMW01000224.1	+	1116	1168	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-306-55	NZ.LINE01000024.1	-	45200	45148	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-210-1	NZ.AMNE01000034.1	+	131957	132009	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-199-1	NZ.AMNQ01000115.1	-	15260	15208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-197-1	NZ.AMNR01000090.1	-	37498	37446	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-217-1	NZ.AMLX01000040.1	+	100589	100641	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-787-1	NZ.AUQF01000013.1	+	87900	87952	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-779-1	NZ.ATHK01000082.1	-	37777	37725	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-765-1	NZ.AKYM01000112.1	+	100553	100605	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-218-1	NZ.AMLV01000008.1	-	37697	37645	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-279-14	NZ.LINN01000029.1	+	4123	4175	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-768-1	NZ.AMMQ01000223.1	-	36339	36287	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-214-1	NZ.AMNA01000068.1	-	34202	34150	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-306-56	NZ.LIMZ01000035.1	-	45097	45045	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-789-1	NZ.AUQH01000002.1	+	110425	110477	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-762-1	NZ.AMBV01000030.1	-	37701	37649	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-237-16	NZ.LINT01000029.1	-	9659	9607	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-776-1	NZ.AMLT01000019.1	+	97303	97355	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-778-1	NZ.ASRF01000014.1	-	24955	24903	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-219-1	NZ.AMLU01000019.1	+	25396	25448	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-243-2	NZ.LINY01000015.1	+	105471	105523	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-203-1	NZ.AMNF01000034.1	-	37601	37549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-48	NZ.LIOC01000040.1	+	43729	43781	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-777-1	NZ.AOZC01000026.1	+	95441	95493	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-306-57	NZ.LIOB01000011.1	+	104279	104331	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-782-1	NZ.AOZA01000016.1	+	103042	103094	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-770-1	NZ.AKYK01000046.1	+	100992	101044	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-181-1	NZ.AKYO01000018.1	-	37601	37549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-763-1	NZ.AMBW01000014.1	-	37691	37639	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-225-50	NZ.LIMQ01000012.1	-	37858	37806	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-757-1	NZ.AMMX01000038.1	-	23868	23816	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-781-1	NZ.AOZD01000012.1	-	25990	25938	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-170-49	NZ.LIOA01000019.1	-	37518	37466	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-206-1	NZ.AMNU01000070.1	-	37496	37444	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-786-1	NZ.AYDR01000087.1	-	37855	37803	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-224-3	NZ.LINA01000049.1	-	337	285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-278-22	NZ.LING01000005.1	-	45365	45313	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-225-51	NZ.LINU01000054.1	+	43650	43702	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-225-52	NZ.LIOD01000004.1	+	110443	110495	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-230-4	NZ.LIOE01000015.1	-	37726	37674	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-233-5	NZ.LINX01000023.1	+	97750	97802	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-991	NZ.CJPA01000016.1	-	39706	39654	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-992	NZ.CJAF01000016.1	-	39540	39488	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-993	NZ.CIZS01000014.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1124	NZ.CIYB01000016.1	+	104158	104210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-994	NZ.CJVP01000015.1	+	103906	103958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-995	NZ.CJSJ01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-996	NZ.CIYR01000014.1	+	107420	107472	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-997	NZ.CJXB01000011.1	-	39375	39323	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-998	NZ.CJOR01000016.1	-	39723	39671	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-999	NZ.CJXG01000016.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-306-58	NZ.LIMT01000017.1	-	45297	45245	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1000	NZ.CJKE01000013.1	+	107689	107741	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1001	NZ.CJNZ01000016.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1002	NZ.CJDB01000010.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1003	NZ.CJOI01000014.1	-	39382	39330	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1004	NZ.CJSV01000015.1	+	104172	104224	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1005	NZ.CJQV01000016.1	+	104162	104214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1006	NZ.CIXV01000015.1	+	104055	104107	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1007	NZ.CJFB01000014.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1008	NZ.CIZO01000016.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1009	NZ.CJQD01000015.1	+	107622	107674	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1010	NZ.CJML01000013.1	+	107971	108023	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1011	NZ.CJQK01000014.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1012	NZ.CJYI01000016.1	-	39587	39535	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1013	NZ.CJWK01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1014	NZ.CJAN01000017.1	-	39533	39481	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1015	NZ.CJBI01000011.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1016	NZ.CJJK01000015.1	-	39560	39508	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1017	NZ.CJWZ01000010.1	-	39382	39330	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1018	NZ.CJUH01000016.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1019	NZ.CJQU01000014.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1020	NZ.CJBD01000015.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1021	NZ.CJLK01000010.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1022	NZ.CJJJ01000015.1	+	104149	104201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1023	NZ.CJOS01000016.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1024	NZ.CJFY01000016.1	+	104150	104202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1025	NZ.CJJK01000012.1	+	107993	108045	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1026	NZ.CJHE01000016.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1027	NZ.CJYF01000016.1	+	104092	104144	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1028	NZ.CJKV01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1029	NZ.CJSK01000014.1	+	107994	108046	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1030	NZ.CJVT01000015.1	-	39373	39321	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1031	NZ.CJBP01000016.1	+	104148	104200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1032	NZ.CJCZ01000022.1	+	43275	43327	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1033	NZ.CJSD01000015.1	-	39361	39309	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1034	NZ.CJMQ01000013.1	+	107855	107907	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1035	NZ.CJVK01000013.1	+	104142	104194	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1036	NZ.CJVM01000016.1	+	104161	104213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1037	NZ.CJJW01000015.1	+	104139	104191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1038	NZ.CJSL01000014.1	+	103996	104048	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1039	NZ.CIYF01000014.1	+	104144	104196	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-306-59	NZ.LIMV01000003.1	+	104298	104350	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-306-60	NZ.LINF01000043.1	+	42428	42480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-306-61	NZ_LINJ01000010.1	+	55677	55729	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-306-62	NZ_LINI01000110.1	+	22614	22666	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-306-63	NZ_LIMU01000037.1	-	45297	45245	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-293-1	NZ_JHAH01000023.1	-	45098	45046	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1015-1	NZ_CAAR01000266.1	-	2721	2669	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-296-1	NZ_JHAE01000047.1	+	42429	42481	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-297-1	NZ_JHAF01000021.1	-	45098	45046	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-30	NZ_CQGI01000015.1	+	42522	42574	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-31	NZ_CQGG01000016.1	+	42512	42564	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-32	NZ_CQHF01000017.1	-	45178	45126	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-294-1	NZ_JHAI01000009.1	-	45098	45046	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-33	NZ_CQGW01000017.1	+	42551	42603	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-34	NZ_CQHV01000017.1	-	45252	45200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-35	NZ_CQGU01000016.1	+	42527	42579	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-951-1	NZ_AJGK01000058.1	-	19387	19335	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-952-1	NZ_AKZO01000027.1	-	19333	19281	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-967-1	NZ_AUQL01000037.1	+	104438	104490	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-959-1	NZ_AUQT01000002.1	-	45277	45225	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-966-1	NZ_AUQN01000036.1	+	104414	104466	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-964-1	NZ_AUQM01000035.1	+	104413	104465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-961-1	NZ_AUQV01000004.1	-	45184	45132	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-290-1	NZ_JABZ01000035.1	-	39416	39364	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-36	NZ_CQHE01000015.1	-	45235	45183	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1040	NZ_CJRN01000014.1	-	41512	41460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1041	NZ_CJRJ01000014.1	-	39360	39308	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1042	NZ_CJRD01000011.1	+	157688	157740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-37	NZ_CQHU01000017.1	+	42532	42584	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-490-1	NZ_AKFX01000012.1	-	49253	49201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-963-1	NZ_AOXC01000032.1	-	45190	45138	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-495-1	NZ_AYVI01000129.1	-	34669	34617	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-38	NZ_CQJH01000016.1	+	43122	43174	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-509-1	NZ_ALEP01000014.1	+	103706	103758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-39	NZ_CQGS01000016.1	-	45260	45208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-513-1	NZ_ALGM01000023.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-40	NZ_CQHS01000018.1	-	45164	45112	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-514-1	NZ_ALGN01000014.1	+	103703	103755	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-41	NZ_CQHQ01000017.1	+	42531	42583	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1043	NZ_CJRH01000015.1	+	104161	104213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1044	NZ_CJUS01000013.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-484-1	NZ_AJVD01000011.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-42	NZ_CQGL01000016.1	+	42551	42603	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-472-1	NZ_AKFY01000012.1	+	96338	96390	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-43	NZ_CQGY01000016.1	+	42551	42603	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-473-1	NZ_AKFZ01000014.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-957-1	NZ_AJTE01000099.1	-	13364	13312	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-511-1	NZ_ALGO01000040.1	+	103706	103758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-956-1	NZ_AJTD01000295.1	+	4207	4259	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1045	NZ_CJRA01000015.1	+	108136	108188	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-491-1	NZ_AKFW01000012.1	-	49253	49201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-954-1	NZ_AJXA01000168.1	+	4121	4173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-960-1	NZ_AUQU01000003.1	-	45184	45132	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-517-1	NZ_ALEI01000040.1	-	49344	49292	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-497-1	NZ_ALEN01000014.1	-	49251	49199	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-965-1	NZ_AUQO01000020.1	-	45183	45131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-508-1	NZ_ALEO01000005.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-44	NZ_CQHI01000016.1	+	42508	42560	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-45	NZ_CQGK01000016.1	+	42508	42560	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-46	NZ_CQGN01000018.1	+	42526	42578	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-47	NZ_CQGV01000017.1	+	42523	42575	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-478-1	NZ_ALGV01000705.1	+	1026	1078	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1026-1	NZ_ACBF01000011.1	+	90926	90978	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-48	NZ_CQGR01000016.1	+	42549	42601	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-49	NZ_CQHB01000017.1	-	45260	45208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1012-1	NZ_ABAM02000001.1	+	4673479	4673531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-299-1	NZ_AHUV01000040.1	-	45184	45132	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-479-1	NZ_ALHB01000061.1	-	49392	49340	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-504-1	NZ_ALHG01000001.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-913-1	NZ_AFYZ01000020.1	+	135012	135064	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-50	NZ_CQGH01000017.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1046	NZ_CJQZ01000013.1	-	39377	39325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-945-1	NZ_AOXV01000110.1	+	71399	71451	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-526-1	NZ_ALEK01000010.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-474-1	NZ_AKGA01000012.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-907-1	NZ_AROZ01000014.1	+	3149	3201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-548-1	NZ_ALFS01000030.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-512-1	NZ_ALEM01000020.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-554-1	NZ_ALFX01000011.1	+	103706	103758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-492-1	NZ_ALEX01000033.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-284-1	NZ_APWL01000003.1	-	82310	82258	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-550-1	NZ_ALGD01000026.1	+	103707	103759	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-506-1	NZ_ALGK01000023.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-914-1	NZ_AFZA01000020.1	+	98771	98823	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-900-1	NZ_AYEE01000002.1	-	45343	45291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-527-1	NZ_ALHH01000057.1	+	103704	103756	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-515-1	NZ_ALGP01000021.1	+	103706	103758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-533-1	NZ_ALHM01000062.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-501-1	NZ_ALHE01000055.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-937-1	NZ_AYDP01000046.1	-	278	226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-502-1	NZ_ALHF01000013.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-543-1	NZ_ALEL01000033.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-519-1	NZ_ALEQ01000021.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-934-1	NZ_AOXF01000013.1	+	104433	104485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-477-1	NZ_AHUQ01000003.1	+	103706	103758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-544-1	NZ_ALEV01000015.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-939-1	NZ_AOXW01000036.1	+	104624	104676	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-564-1	NZ_ALFK01000006.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1047	NZ_CJRK01000015.1	-	41507	41455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-920-1	NZ_AOYB01000081.1	+	63749	63801	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-559-1	NZ_ALFO01000008.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1048	NZ_CJRB01000013.1	+	115815	115867	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-552-1	NZ_ALFP01000008.1	+	103716	103768	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1049	NZ_CJQX01000014.1	+	104143	104195	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-915-1	NZ_AOYF01000047.1	-	45153	45101	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-549-1	NZ_ALFT01000006.1	-	49343	49291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-288-1050	NZ_CJRF01000014.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-557-1	NZ_ALFU01000022.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-919-1	NZ_AOYG01000081.1	-	19765	19713	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-555-1	NZ_ALFY01000031.1	-	49343	49291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-938-1	NZ_AOYP01000063.1	-	10370	10318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-560-1	NZ_ALFZ01000023.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-499-1	NZ_ALIA01000399.1	+	1803	1855	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-556-1	NZ_ALGE01000038.1	-	49191	49139	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-529-1	NZ_ALHI01000010.1	+	103704	103756	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-904-1	NZ_APAK01000385.1	-	9620	9568	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-535-1	NZ_ALHN01000022.1	+	103703	103755	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-924-1	NZ_AHIA01000038.1	-	35206	35154	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-516-1	NZ_ALIC01000015.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-523-1	NZ_ALEJ01000020.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-943-1	NZ_CAGQ01000056.1	-	3031	2979	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1051	NZ_CJRG01000004.1	+	104158	104210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-524-1	NZ_ALES01000011.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-910-1	NZ_AFYX01000021.1	+	104135	104187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-525-1	NZ_ALET01000030.1	+	103705	103757	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-912-1	NZ_AFYY01000022.1	+	135205	135257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-493-1	NZ_ALFD01000131.1	+	8328	8380	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-901-1	NZ_AYED01000002.1	-	45156	45104	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-547-1	NZ_ALEY01000030.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-553-1	NZ_ALFM01000022.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-897-1	NZ_AYEH01000007.1	+	55314	55366	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-567-1	NZ_ALFR01000017.1	+	103706	103758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-510-1	NZ_ALHZ01000159.1	-	6062	6010	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-566-1	NZ_ALGG01000006.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-921-1	NZ_AOXH01000205.1	+	25845	25897	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-521-1	NZ_ALGL01000025.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-941-1	NZ_AOXU01000041.1	-	41814	41762	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-518-1	NZ_ALGQ01000023.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-944-1	NZ_AOXX01000060.1	+	110031	110083	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-522-1	NZ_ALHA01000033.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-505-1	NZ_ALHT01000042.1	-	49343	49291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-918-1	NZ_AOYE01000040.1	-	45074	45022	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-532-1	NZ_ALHL01000082.1	-	49347	49295	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-927-1	NZ_AOYI01000002.1	-	49162	49110	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-494-1	NZ_ALHX01000060.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-520-1	NZ_ALER01000036.1	+	103705	103757	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-545-1	NZ_ALEW01000006.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-933-1	NZ_AQFN01000034.1	-	36977	36925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-558-1	NZ_ALFL01000006.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-480-1	NZ_AHUM01000178.1	+	53030	53082	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-911-1	NZ_AFYW01000025.1	+	135019	135071	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-551-1	NZ_ALFQ01000008.1	+	103705	103757	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-500-1	NZ_ALID01000015.1	-	49400	49348	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-902-1	NZ_AYEC01000105.1	+	100326	100378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-561-1	NZ_ALGA01000017.1	-	20301	20249	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-931-1	NZ_AYDS01000004.1	-	45346	45294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1052	NZ_CJRE01000016.1	-	39355	39303	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-563-1	NZ_ALGF01000007.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-476-1	NZ_AWOI01000031.1	-	49718	49666	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-922-1	NZ_AYDQ01000012.1	+	111446	111498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-530-1	NZ_ALHJ01000014.1	+	103703	103755	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-926-1	NZ_AYDA01000017.1	-	49162	49110	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-498-1	NZ_ALFB01000033.1	+	103706	103758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-531-1	NZ_ALHK01000054.1	+	103704	103756	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-942-1	NZ_AYEJ01000008.1	+	9768	9820	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-507-1	NZ_ALFC01000017.1	+	103666	103718	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-537-1	NZ_ALHO01000024.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-923-1	NZ_AOXG01000019.1	+	110333	110385	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-503-1	NZ_ALHU01000058.1	-	49345	49293	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-538-1	NZ_ALHP01000022.1	-	49345	49293	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-948-1	NZ_AOXQ01000190.1	-	18527	18475	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-562-1	NZ_ALFJ01000009.1	+	103711	103763	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-496-1	NZ_AHUU01000034.1	+	3317	3369	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-565-1	NZ_ALFI01000001.1	+	103715	103767	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-932-1	NZ_AOXY01000013.1	-	45355	45303	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-540-1	NZ_ALEZ01000020.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-917-1	NZ_AOYC01000001.1	-	45077	45025	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-541-1	NZ_ALHR01000009.1	+	103734	103786	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-916-1	NZ_AOYD01000029.1	-	45153	45101	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1053	NZ_CJRM01000011.1	+	140955	141007	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-909-1	NZ_AOYH01000028.1	+	73247	73299	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-905-1	NZ_AOYM01000106.1	-	36696	36644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-542-1	NZ_ALHW01000479.1	+	6260	6312	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-903-1	NZ_APAM01000189.1	+	8581	8633	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-536-1	NZ_ALFA01000040.1	+	103705	103757	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-528-1	NZ_ALHS01000040.1	+	22613	22665	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-946-1	NZ_APAR01000027.1	-	49439	49387	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-539-1	NZ_ALHQ01000071.1	-	12300	12248	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1054	NZ_CJWV01000015.1	+	107860	107912	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-274-1	NZ_ARYU01000013.1	+	97576	97628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-534-1	NZ_ALHV01000013.1	+	19300	19352	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-949-1	NZ_AMSN01000034.1	-	2989	2937	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-546-1	NZ_ALIB01000011.1	-	49100	49048	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-283-1	NZ_ALHY01000024.1	-	37543	37491	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-282-1	NZ_ARYV01000035.1	+	42107	42159	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-935-1	NZ_AOYU01000078.1	+	104625	104677	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-947-1	NZ_AOXS01000229.1	+	15341	15393	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1055	NZ_CIUU01000016.1	-	39380	39328	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1056	NZ_CJLP01000012.1	-	39527	39475	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1057	NZ_CJWV01000015.1	-	39378	39326	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1058	NZ_CJYP01000016.1	+	104128	104180	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1059	NZ_CJYT01000016.1	+	104158	104210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1060	NZ_CJGE01000014.1	-	41507	41455	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-746-1	NZ_AJGY01000070.1	+	20275	20327	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1061	NZ_CJQG01000016.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1062	NZ_CJUK01000016.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-573-1	NZ_ALFN01000042.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1063	NZ_CJXH01000016.1	-	39371	39319	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-574-1	NZ_ALGC01000047.1	-	49343	49291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1064	NZ_CJUP01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-568-1	NZ_ALGH01000012.1	+	103706	103758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-570-1	NZ_ALGI01000014.1	+	103700	103752	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1065	NZ_CJLU01000013.1	+	107988	108040	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-583-1	NZ_ALGS01000034.1	+	103661	103713	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1066	NZ_CJGK01000016.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-727-1	NZ_ALGX01000047.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1067	NZ_CJEP01000016.1	-	39536	39484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-577-1	NZ_ALHC01000023.1	-	49191	49139	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1068	NZ_CEXR01000016.1	-	39537	39485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1069	NZ_CJXF01000015.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-723-1	NZ_AHUN01000085.1	-	40121	40069	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1070	NZ_CJQF01000016.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-733-1	NZ_AOZG01000039.1	+	32849	32901	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1071	NZ_CIZE01000017.1	-	41512	41460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-739-1	NZ_APAO01000024.1	+	105311	105363	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1072	NZ_CJMN01000014.1	+	107976	108028	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1073	NZ_CJSH01000016.1	+	78112	78164	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-165-1	NZ_AZRG01000037.1	-	14220	14168	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1074	NZ_CJSM01000016.1	+	104155	104207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-738-1	NZ_ALPO01000015.1	-	21962	21910	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-163-1	NZ_CAGR02000040.1	+	103650	103702	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1075	NZ_CJKJ01000014.1	-	41511	41459	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1076	NZ_CJLZ01000002.1	-	198398	198346	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-166-1	NZ_JOKK01000017.1	+	93924	93976	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1077	NZ_CJBE01000011.1	-	39456	39404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-745-1	NZ_AJGZ01000018.1	-	37514	37462	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1078	NZ_CIUR01000015.1	+	104168	104220	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-744-1	NZ_AJHA01000094.1	-	3193	3141	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1079	NZ_CJGU01000016.1	+	104144	104196	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-571-1	NZ_ALGJ01000040.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1080	NZ_CJQB01000016.1	-	39601	39549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-579-1	NZ_ALGT01000019.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1081	NZ_CJHI01000015.1	-	41504	41452	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-728-1	NZ_ALGY01000015.1	+	103708	103760	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1082	NZ_CJWQ01000013.1	+	107425	107477	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-172-1	NZ_APIX01000052.1	+	43443	43495	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1083	NZ_CJEZ01000016.1	+	104158	104210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-173-1	NZ_AMNL01000067.1	-	4749	4697	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1084	NZ_CJZD01000015.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-742-1	NZ_AMNM01000007.1	-	37497	37445	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1085	NZ_CIZM01000016.1	+	104147	104199	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-736-1	NZ_ALPP01000010.1	-	45323	45271	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1086	NZ_CJVI01000016.1	+	104157	104209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-749-1	NZ_AJGW01000005.1	-	37498	37446	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1087	NZ_CJUI01000001.1	-	39357	39305	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-743-1	NZ_AJGX01000011.1	+	43277	43329	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1088	NZ_CJBU01000013.1	-	39578	39526	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1089	NZ_CJGO01000015.1	-	39574	39522	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-572-1	NZ_ALGB01000053.1	-	49347	49295	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1090	NZ_CJVX01000017.1	+	104154	104206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-724-1	NZ_ALGR01000015.1	-	49252	49200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1091	NZ_CJKB01000008.1	-	39361	39309	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-582-1	NZ_ALGW01000052.1	+	103706	103758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1125	NZ_CJFJ01000015.1	-	39564	39512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-737-1	NZ_AOZE01000034.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1092	NZ_CJLX01000013.1	-	41508	41456	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-174-1	NZ_AMNG01000040.1	+	43295	43347	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1093	NZ_CJWV01000016.1	-	39366	39314	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-747-1	NZ_AMNH01000065.1	+	43992	44044	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1094	NZ_CJEB01000016.1	-	39534	39482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-569-1	NZ_ALFV01000010.1	-	49343	49291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1095	NZ_CJDP01000015.1	-	39373	39321	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-581-1	NZ_ALGU01000026.1	+	103706	103758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1096	NZ_CJVF01000015.1	-	41231	41179	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1097	NZ_CJJO01000016.1	-	39387	39335	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-580-1	NZ_ALGZ01000049.1	-	49107	49055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1098	NZ_CJOH01000016.1	+	104153	104205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-730-1	NZ_AHUH01000066.1	+	104411	104463	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1099	NZ_CJDR01000016.1	+	104156	104208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-740-1	NZ_APAH01000055.1	-	2949	2897	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1100	NZ_CJGR01000016.1	-	39535	39483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1101	NZ_CJBO01000016.1	+	104166	104218	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-171-1	NZ_AMMZ01000027.1	-	37498	37446	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1102	NZ_CJJE01000015.1	+	103986	104038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1103	NZ_CJED01000016.1	+	104139	104191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-725-1	NZ_ALFE01000018.1	-	4666	4614	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-726-1	NZ_AHUL01000075.1	+	103648	103700	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-741-1	NZ_AMMY01000035.1	+	8157	8209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-722-1	NZ_ALHY01000024.1	-	9651	9599	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-169-1	NZ_ARYS01000012.1	+	104604	104656	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-735-1	NZ_AYUQ01000070.1	+	104455	104507	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1004-1	NZ_ABFG01000008.1	-	54519	54467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-576-1	NZ_ALFH01000027.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-679-1	NZ_AHUR01000081.1	+	103706	103758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-168-1	NZ_ARYR01000001.1	+	100051	100103	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-578-1	NZ_ALFF01000033.1	-	26193	26141	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-575-1	NZ_ALFG01000008.1	-	49346	49294	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-431-1	NZ_AFCK010001570.1	+	1664	1716	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-5-6	NZ_LIMM01000012.1	+	104491	104543	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1014-1	NC_003198.1	-	3639708	3639656	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1017-1	NC_003197.1	+	4305705	4305757	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-440-1	NZ_HF969015.1	+	4155499	4155551	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-731-1	NZ_CM001153.1	-	3480716	3480664	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1000-1	NZ_CM001062.1	+	4224780	4224832	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-468-1	NZ_CM001151.1	+	4332666	4332718	hypo → hypo → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-953-1	NC_016832.1	-	3614165	3614113	rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-971-1	NC_016810.1	+	4327143	4327195	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-470-1	NZ_KB731431.1	+	30272	30324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-483-1	NZ_KE349350.1	+	30273	30325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-489-1	NZ_KE350075.1	+	55984	56036	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-485-1	NZ_KE349599.1	+	30273	30325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-487-1	NZ_KE349812.1	+	30273	30325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-482-1	NZ_KE349293.1	+	30273	30325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-486-1	NZ_KE349740.1	+	30273	30325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-475-1	NZ_KE349031.1	+	30273	30325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-481-1	NZ_KE349069.1	+	30273	30325	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-488-1	NZ_KE350026.1	+	30274	30326	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-463-1	NC_021818.1	+	364880	364932	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-307-1	NZ_KI911915.1	+	3835966	3836018	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-330	NC_022569.1	+	4382615	4382667	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-601-1	NZ_CP007251.1	+	4194336	4194388	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-241-1	NZ_KK082459.1	-	37622	37570	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-612-1	NZ_CP007344.1	+	4173178	4173230	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-136-2	NZ_KI635587.1	+	21280	21332	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-621-1	NZ_CP007353.1	+	4173243	4173295	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-699-1	NZ_CP007301.1	+	4173901	4173953	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-626-1	NZ_CP007335.1	+	4173885	4173937	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-748-1	NC_021810.1	+	1275161	1275213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-271-1	NZ_CP012038.1	+	2994691	2994743	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1031-1	NC_011294.1	-	4173886	4173938	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1003-1	NC_011274.1	+	3480716	3480664	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-908-1	NC_006511.1	+	4083750	4083802	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1027-1	NC_011094.1	+	4182786	4182838	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-266-2	NC_011080.1	+	4297332	4297384	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1001-1	NC_011205.1	+	4332663	4332715	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1006-1	NC_011083.1	+	4310089	4310141	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-999-1	NC_011149.1	+	4232095	4232147	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1-1	NC_011147.1	+	4079434	4079486	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1032-1	NC_012125.1	+	4278107	4278159	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo →
Sen-968-1	NC_016854.1	+	4328460	4328512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-973-1	NC_016857.1	+	4327144	4327196	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-991-1	NC_016863.1	+	4266896	4266948	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-139-1	NZ_CP011791.1	+	4166192	4166244	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-143-1	NZ_CP007249.2	+	4200339	4200391	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1005-1	NC_017623.1	+	216124	216176	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-988-1	NC_016860.1	+	4410794	4410846	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-969-1	NC_022544.1	+	4264269	4264321	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-990-1	NC_021151.1	+	4300603	4300655	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1002-1	NC_016831.1	-	3603834	3603782	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-158-1	NZ_CP007329.2	+	4167433	4167485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-139-2	NZ_CP011790.1	+	4166710	4166762	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-955-1	NC_021176.1	-	3625365	3625313	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-159-1	NZ_CP007267.2	+	4167317	4167369	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-314-1	NC_021820.1	-	93015	92963	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-436-1	NC_021844.1	-	4520505	4520453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-466-1	NZ_KE348840.1	+	30272	30324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-732-1	NC_022221.1	-	3597464	3597412	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-928-1	NC_021984.1	-	3651991	3651939	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-895-1	NC_021902.1	-	4667263	4667211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-51	NZ_CTAM01000028.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-52	NZ_CTAF01000018.1	-	45343	45291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-53	NZ_CTCI01000019.1	+	42438	42490	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-54	NZ_CTAS01000021.1	+	42473	42525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-55	NZ_CTBO01000018.1	+	42484	42536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-56	NZ_CTMH01000016.1	-	45343	45291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-300-57	NZ_CTOK01000019.1	-	45129	45077	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-58	NZ_CTNR01000018.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-59	NZ_CTLF01000015.1	-	45343	45291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-60	NZ_CTMD01000019.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-61	NZ_CTKB01000021.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-62	NZ_CTMP01000018.1	+	42525	42577	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-63	NZ_CTGQ01000015.1	+	42526	42578	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-64	NZ_CTHY01000018.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-65	NZ_CTMO01000028.1	-	32531	32479	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-66	NZ_CTPW01000017.1	+	42472	42524	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-67	NZ_CTNM01000018.1	-	45152	45100	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-68	NZ_CTME01000020.1	+	42484	42536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-69	NZ_CTQE01000008.1	+	42483	42535	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-70	NZ_CTOJ01000017.1	-	45337	45285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-950-1	NC_022525.1	+	4159260	4159312	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-343-1	NC_022991.1	+	4197585	4197637	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-760-1	NC_021812.2	+	4742642	4742694	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-193-1	NZ_CP005995.1	+	2820952	2821004	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-273-1	NZ_CP009559.1	-	1380546	1380494	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-273-2	NZ_CP009049.1	+	104123	104175	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1016-1	NC_004631.1	-	3625368	3625316	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-958-1	NC_016856.1	+	4319290	4319342	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1011-1	NC_010102.1	+	4247096	4247148	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-780-1	NZ_CM001274.1	+	4283628	4283680	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-71	NZ_CTJW01000019.1	+	42531	42583	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-72	NZ_CTOX01000017.1	-	45201	45149	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1104	NZ_CJJY01000016.1	+	104152	104204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-73	NZ_CTGN01000016.1	-	45167	45115	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-74	NZ_CTLO01000018.1	+	42452	42504	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-75	NZ_CTBQ01000018.1	-	45337	45285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-76	NZ_CTB01000017.1	+	42551	42603	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-77	NZ_CTB01000017.1	+	42479	42531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-78	NZ_CTHE01000019.1	+	42480	42532	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-79	NZ_CTHD01000017.1	-	45517	45465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-80	NZ_CTF01000019.1	-	45344	45292	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-81	NZ_CTBQ01000019.1	+	42505	42557	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-82	NZ_CTNQ01000016.1	+	42524	42576	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-83	NZ_CTBE01000020.1	+	42438	42490	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-84	NZ_CTIA01000021.1	+	42453	42505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-85	NZ_CTNO01000020.1	+	42456	42508	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-86	NZ_CTB01000011.1	+	104187	104239	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-87	NZ_CTB01000020.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-88	NZ_CTMX01000017.1	+	42531	42583	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-89	NZ_CTBX01000019.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-90	NZ_CTGF01000018.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-91	NZ_CTY01000017.1	+	42489	42541	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-92	NZ_CTBK01000019.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-93	NZ_CTL01000018.1	+	42496	42548	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-94	NZ_CTB01000018.1	+	42532	42584	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-95	NZ_CTNL01000017.1	-	46977	46925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-96	NZ_CTCJ01000017.1	-	45272	45220	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-97	NZ_CTPA01000018.1	-	45141	45089	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-300-98	NZ.CTAZ01000013.1	+	104065	104117	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-99	NZ.CTLB01000018.1	+	42527	42579	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-100	NZ.CTMY01000021.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-101	NZ.CTLG01000005.1	-	45116	45064	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-102	NZ.CTPC01000020.1	+	42473	42525	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-103	NZ.CTQU01000018.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-104	NZ.CTMB01000017.1	+	42472	42524	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-105	NZ.CTQL01000158.1	+	1706	1758	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-106	NZ.CTPE01000019.1	-	45110	45058	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-107	NZ.CTQA01000017.1	+	42501	42553	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-108	NZ.CTOD01000014.1	+	104184	104236	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-109	NZ.CTMU01000020.1	+	43122	43174	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-110	NZ.CTOB01000018.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-111	NZ.CTGB01000019.1	-	45107	45055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-112	NZ.CTGS01000018.1	-	45214	45162	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-113	NZ.CTAT01000013.1	-	45107	45055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-114	NZ.CTGO01000018.1	+	42484	42536	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-115	NZ.CTLS01000021.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-116	NZ.CTNX01000021.1	+	42503	42555	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-117	NZ.CTPF01000017.1	-	45176	45124	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-118	NZ.CTOC01000018.1	-	45107	45055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-119	NZ.CTNV01000019.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-120	NZ.CTQT01000020.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-121	NZ.CTLJ01000018.1	+	42531	42583	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-122	NZ.CTLQ01000018.1	+	42485	42537	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-123	NZ.CTCD01000016.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-124	NZ.CTMA01000017.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-125	NZ.CTMI01000019.1	-	45107	45055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-126	NZ.CTAH01000011.1	-	46977	46925	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-127	NZ.CTCF01000017.1	-	45271	45219	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-128	NZ.CTPG01000019.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-129	NZ.CTAK01000019.1	-	45108	45056	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-130	NZ.CTOQ01000019.1	+	42472	42524	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-131	NZ.CTCG01000017.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-132	NZ.CTAD01000017.1	-	46430	46378	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-133	NZ.CTAP01000017.1	+	42490	42542	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-134	NZ.CTAQ01000017.1	+	42528	42580	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-962-1	NC.017046.1	+	4325695	4325747	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-620-1	NZ.CP007352.1	+	4173893	4173945	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-606-1	NZ.CP007327.1	+	4173907	4173959	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-160-1	NZ.CP007245.1	+	4196527	4196579	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-706-1	NZ.CP007306.1	+	4173906	4173958	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-610-1	NZ.CP007433.1	+	4173880	4173932	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-648-1	NZ.CP007380.1	+	4173899	4173951	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-663-1	NZ.CP007382.1	+	4173900	4173952	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-696-1	NZ.CP007295.1	+	4173849	4173901	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-301-1	NZ.AP014565.1	+	4500867	4500919	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-597-1	NZ.CP007359.1	+	4158686	4158738	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-595-1	NZ.CP007358.1	+	4155155	4155207	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-139-3	NZ.CP009085.2	+	4167334	4167386	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-139-4	NZ.CP009084.2	+	4167333	4167385	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-255-1	NZ.CP010280.1	+	3658105	3658157	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-139-5	NZ_CP007507.1	+	4166959	4167011	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-600-1	NZ_CP007266.1	+	4154819	4154871	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-10-1	NZ_CP007532.1	+	1359262	1359314	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-682-1	NZ_CP007279.1	+	4173886	4173938	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-680-1	NZ_CP007277.1	+	4173900	4173952	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-704-1	NZ_CP007304.1	+	4173906	4173958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-690-1	NZ_CP007288.1	+	4173879	4173931	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-695-1	NZ_CP007294.1	+	4173888	4173940	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-705-1	NZ_CP007305.1	+	4173909	4173961	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-701-1	NZ_CP007274.1	-	4451692	4451640	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-685-1	NZ_CP007282.1	+	4173887	4173939	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-623-1	NZ_CP007362.1	+	4173904	4173956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-624-1	NZ_CP007363.1	+	4173904	4173956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-617-1	NZ_CP007349.1	+	4173904	4173956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-703-1	NZ_CP007303.1	+	4173905	4173957	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-717-1	NZ_CP007431.1	+	4174081	4174133	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-151-1	NZ_CP007260.1	+	4162468	4162520	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-720-1	NZ_CP007372.1	+	4173901	4173953	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-692-1	NZ_CP007290.1	+	4173905	4173957	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-584-1	NZ_CP007320.1	+	4149921	4149973	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-149-1	NZ_CP007262.1	+	4166935	4166987	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-585-1	NZ_CP007321.1	+	4158170	4158222	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-150-1	NZ_CP007261.1	+	4171043	4171095	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-709-1	NZ_CP007309.1	+	4173904	4173956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-153-1	NZ_CP007258.1	+	4162080	4162132	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-654-1	NZ_CP007373.1	+	4173904	4173956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-684-1	NZ_CP007281.1	+	4173903	4173955	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-285-1	NZ_CP007505.1	+	909485	909537	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-235-1	NZ_CP007530.1	+	3875383	3875435	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-607-1	NZ_CP007328.1	+	4173904	4173956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-613-1	NZ_CP007345.1	+	4173898	4173950	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-132-1	NZ_CP007533.1	+	3681808	3681860	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-693-1	NZ_CP007291.1	+	4173893	4173945	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-614-1	NZ_CP007346.1	+	4173899	4173951	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-700-1	NZ_CP007334.1	+	580417	580469	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-658-1	NZ_CP007396.1	+	4173900	4173952	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-659-1	NZ_CP007397.1	+	4173889	4173941	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-660-1	NZ_CP007398.1	+	4173905	4173957	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-687-1	NZ_CP007284.1	+	4173899	4173951	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-702-1	NZ_CP007302.1	+	4173892	4173944	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-707-1	NZ_CP007307.1	+	4173908	4173960	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-657-1	NZ_CP007395.1	+	4173913	4173965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-638-1	NZ_CP007405.1	+	4173903	4173955	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-708-1	NZ_CP007308.1	+	4173906	4173958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-686-1	NZ_CP007283.1	+	4173887	4173939	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-619-1	NZ_CP007351.1	+	4173904	4173956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-698-1	NZ_CP007300.1	+	4173902	4173954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-710-1	NZ_CP007310.1	+	4173912	4173964	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-718-1	NZ_CP007317.1	+	4173901	4173953	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-716-1	NZ_CP007316.1	+	4173895	4173947	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-719-1	NZ_CP007318.1	+	4173895	4173947	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-713-1	NZ_CP007313.1	+	4173907	4173959	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-604-1	NZ_CP007325.1	+	4173909	4173961	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-652-1	NZ_CP007370.1	+	4173899	4173951	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-616-1	NZ_CP007348.1	+	4173876	4173928	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-650-1	NZ_CP007368.1	+	4173906	4173958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-634-1	NZ_CP007401.1	+	4173906	4173958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-632-1	NZ_CP007343.1	+	4173899	4173951	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-668-1	NZ_CP007387.1	+	4173904	4173956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-694-1	NZ_CP007293.1	+	4173853	4173905	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-11-1	NZ_CP007534.1	+	1393133	1393185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-715-1	NZ_CP007315.1	+	4173902	4173954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-625-1	NZ_CP007364.1	+	4173905	4173957	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-637-1	NZ_CP007404.1	+	4173903	4173955	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-714-1	NZ_CP007314.1	+	4173860	4173912	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-618-1	NZ_CP007350.1	+	4173904	4173956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-688-1	NZ_CP007285.1	+	4173888	4173940	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-627-1	NZ_CP007336.1	+	4173855	4173907	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-691-1	NZ_CP007289.1	+	4173857	4173909	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-711-1	NZ_CP007311.1	+	4173900	4173952	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-655-1	NZ_CP007374.1	+	4173906	4173958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-142-1	NZ_CP007528.1	-	96083	96031	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-661-1	NZ_CP007429.1	+	4173888	4173940	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-689-1	NZ_CP007286.1	+	4173887	4173939	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-17-1	NZ_CP007531.1	-	2862649	2862597	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-636-1	NZ_CP007403.1	+	4173904	4173956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-640-1	NZ_CP007407.1	+	4173906	4173958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-670-1	NZ_CP007411.1	+	4173906	4173958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-681-1	NZ_CP007278.1	+	4173904	4173956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-641-1	NZ_CP007408.1	+	4173903	4173955	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-635-1	NZ_CP007402.1	+	4173916	4173968	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-678-1	NZ_CP007424.1	+	4173893	4173945	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-712-1	NZ_CP007312.1	+	4173886	4173938	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-673-1	NZ_CP007414.1	+	4173907	4173959	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-599-1	NZ_CP007323.1	+	4174039	4174091	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-697-1	NZ_CP007297.1	+	4173855	4173907	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-672-1	NZ_CP007413.1	+	4173902	4173954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-645-1	NZ_CP007377.1	+	4173902	4173954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-667-1	NZ_CP007386.1	+	4173908	4173960	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-646-1	NZ_CP007378.1	+	4173903	4173955	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-647-1	NZ_CP007379.1	+	4173894	4173946	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-683-1	NZ_CP007280.1	+	4173887	4173939	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-639-1	NZ_CP007406.1	+	4173905	4173957	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-721-1	NZ_CP007417.1	+	4173901	4173953	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-664-1	NZ_CP007383.1	+	4173902	4173954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-669-1	NZ_CP007388.1	+	4173906	4173958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-161-1	NZ_CP007332.1	+	4643968	4644020	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-671-1	NZ_CP007412.1	+	4173902	4173954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-666-1	NZ_CP007385.1	+	4173915	4173967	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-676-1	NZ_CP007418.1	+	4174075	4174127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-642-1	NZ_CP007375.1	+	4173917	4173969	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-633-1	NZ_CP007400.1	+	4173899	4173951	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-665-1	NZ_CP007384.1	+	4173908	4173960	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sen-631-1	NZ_CP007341.1	+	4173899	4173951	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

Sen-674-1	NZ_CP007415.1	+	4173996	4174048	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-586-1	NZ_CP007430.1	+	4173903	4173955	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-677-1	NZ_CP007419.1	+	4173986	4174038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-675-1	NZ_CP007416.1	+	4173982	4174034	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-154-1	NZ_CP007263.1	+	4166548	4166600	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-603-1	NZ_CP007324.1	+	4173903	4173955	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-615-1	NZ_CP007347.1	+	4173902	4173954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-630-1	NZ_CP007340.1	+	4173900	4173952	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-656-1	NZ_CP007464.1	+	4178809	4178861	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-591-1	NZ_CP007355.1	+	4173897	4173949	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-152-1	NZ_CP007259.1	+	4195383	4195435	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-164-1	NZ_CP007465.1	+	4174359	4174411	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-587-1	NZ_CP007322.1	+	4163250	4163302	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-608-1	NZ_CP007330.1	+	4120423	4120475	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-588-1	NZ_CP007298.1	+	4173899	4173951	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-609-1	NZ_CP007331.1	+	4176562	4176614	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-629-1	NZ_CP007338.1	+	4173902	4173954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-596-1	NZ_CP007432.1	+	4173897	4173949	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-628-1	NZ_CP007337.1	+	4173902	4173954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-592-1	NZ_CP007356.1	+	4173897	4173949	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-605-1	NZ_CP007326.1	+	4173906	4173958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-611-1	NZ_CP007434.1	+	4173889	4173941	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-145-1	NZ_CP007246.1	+	4162763	4162815	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-146-1	NZ_CP007247.1	+	4193044	4193096	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-157-1	NZ_CP007252.1	+	4163237	4163289	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-590-1	NZ_CP007421.1	+	4152968	4153020	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-144-1	NZ_CP007248.1	+	4165166	4165218	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-651-1	NZ_CP007369.1	+	4173851	4173903	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-147-1	NZ_CP007175.1	+	4195011	4195063	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-598-1	NZ_CP007360.1	+	4173885	4173937	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-135	NZ_CTH01000018.1	+	42438	42490	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-136	NZ_CTBM01000029.1	+	13413	13465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-137	NZ_CTBC01000018.1	+	42472	42524	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-138	NZ_CTOS01000016.1	+	42474	42526	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-139	NZ_CTAJ01000017.1	-	45157	45105	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-140	NZ_CTHL01000017.1	-	45272	45220	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-141	NZ_CTMZ01000016.1	+	42908	42960	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-142	NZ_CTHW01000018.1	+	42472	42524	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-143	NZ_CTHI01000026.1	+	13439	13491	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-144	NZ_CTPH01000017.1	+	42497	42549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-288-1105	NZ_CJBQ01000016.1	+	104151	104203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-145	NZ_CTPR01000021.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-146	NZ_CTMQ01000016.1	+	42910	42962	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-147	NZ_CTHG01000017.1	+	42531	42583	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-148	NZ_CTFQ01000017.1	+	42517	42569	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-149	NZ_CTTJ01000022.1	+	42437	42489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-150	NZ_CTOLO1000019.1	+	42453	42505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-151	NZ_CTPL01000021.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-152	NZ_CTPX01000020.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-153	NZ_CTNB01000021.1	-	35684	35632	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-154	NZ_CTHS01000020.1	+	42466	42518	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-155	NZ_CTQJ01000023.1	+	49795	49847	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-300-156	NZ.CTQY01000017.1	+	42507	42559	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-157	NZ.CTIC01000016.1	+	42478	42530	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-158	NZ.CTMR01000018.1	+	42531	42583	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-159	NZ.CTJT01000018.1	-	45270	45218	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-160	NZ.CTPS01000016.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-161	NZ.CTMN01000019.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-162	NZ.CTNP01000017.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-163	NZ.CTLW01000018.1	+	42472	42524	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-164	NZ.CTLN01000018.1	+	42531	42583	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-165	NZ.CTHP01000017.1	-	45194	45142	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-166	NZ.CTNT01000016.1	-	45196	45144	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-167	NZ.CTBH01000027.1	+	13435	13487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-168	NZ.CTGL01000018.1	-	45178	45126	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-169	NZ.CTAG01000019.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-170	NZ.CTQZ01000017.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-288-1106	NZ.CTAA01000016.1	-	41507	41455	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-171	NZ.CTAU01000017.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-172	NZ.CTON01000018.1	+	55105	55157	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-173	NZ.CTAE01000017.1	+	42938	42990	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-174	NZ.CTOM01000021.1	+	42452	42504	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-175	NZ.CTNA01000017.1	-	45107	45055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-176	NZ.CTBI01000020.1	-	45123	45071	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-177	NZ.CTLD01000019.1	+	42548	42600	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-178	NZ.CTQH01000018.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-179	NZ.CTIG01000019.1	-	45130	45078	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-180	NZ.CTPO01000019.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-181	NZ.CTLE01000017.1	+	42536	42588	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-182	NZ.CTLH01000017.1	-	45107	45055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-183	NZ.CTAN01000021.1	-	47096	47044	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-184	NZ.CTKI01000017.1	-	47085	47033	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-185	NZ.CTBN01000019.1	+	42472	42524	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-186	NZ.CTHN01000005.1	-	228766	228714	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-187	NZ.CTCC01000018.1	-	45176	45124	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-188	NZ.CTPZ01000017.1	-	45161	45109	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-189	NZ.CTBU01000020.1	+	42438	42490	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-190	NZ.CTQK01000018.1	+	42476	42528	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-191	NZ.CTBS01000017.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-192	NZ.CTFW01000019.1	-	45107	45055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-193	NZ.CTAR01000018.1	+	42531	42583	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-194	NZ.CTQO01000016.1	+	42546	42598	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-195	NZ.CTAI01000017.1	-	45174	45122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-196	NZ.CTPY01000020.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-197	NZ.CTAX01000017.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-198	NZ.CTAV01000019.1	+	42489	42541	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-199	NZ.CTAY01000018.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-200	NZ.CTCB01000010.1	+	104185	104237	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-589-1	NZ.CP007422.1	+	4123191	4123243	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-148-1	NZ.CP007250.1	+	4165607	4165659	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-594-1	NZ.CP007420.1	+	4122037	4122089	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-602-1	NZ.CP007498.1	+	4173902	4173954	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-155-1	NZ.CP007254.1	+	4163479	4163531	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-644-1	NZ.CP007463.1	+	4113654	4113706	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-156-1	NZ_CP007253.1	+	4167210	4167262	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-291-1	NZ_CP007581.1	+	4382613	4382665	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-141-1	NZ_CP007598.1	+	1099087	1099139	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-291-2	NZ_CP007804.1	+	4212582	4212634	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-291-3	NZ_CP009102.1	+	4241573	4241625	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-134-1	NZ_CP007639.1	+	4197939	4197991	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → hypo →
Sen-139-6	NZ_CP009083.1	+	4166984	4167036	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-139-7	NZ_CP009087.1	+	4166622	4166674	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-139-8	NZ_CP009091.1	+	4159359	4159411	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-139-9	NZ_CP009093.1	+	4190780	4190832	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-139-10	NZ_CP009088.1	+	4166019	4166071	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-139-11	NZ_CP009089.1	+	4199181	4199233	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-139-12	NZ_CP009092.1	+	4199355	4199407	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-139-13	NZ_CP009086.1	+	4166667	4166719	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-139-14	NZ_CP009090.1	-	3533924	3533872	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-162-1	NZ_CP007269.1	+	4163479	4163531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-139-15	NZ_CP008928.1	+	2471151	2471203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1033-1	NC_006905.1	+	4238765	4238817	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-649-1	NZ_CP007272.1	+	2781849	2781901	hypo → hypo → hypo → hypo → hypo → hypo →
Sen-649-2	NZ_CP007272.1	-	4860128	4860076	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-662-1	NZ_CP007381.1	+	4173906	4173958	RNA → ←-hypo
Sen-252-1	NZ_CP010282.1	-	4355853	4355801	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-256-1	NZ_CP010281.1	-	3676986	3676934	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-254-1	NZ_CP010279.1	+	3848446	3848498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-257-1	NZ_CP010284.1	-	538801	538749	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-253-1	NZ_CP010283.1	-	4242129	4242077	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-275-1	NZ_LK931482.1	-	3404936	3404884	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-223-1	NZ_LN649235.1	+	4201024	4201076	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-258-1	NZ_CP009561.1	+	1415376	1415428	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-429-1	NZ_CP007483.1	-	4514966	4514914	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-993-1	NC_021814.1	-	4121916	4121864	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-13-1	NZ_CP011259.1	+	1265510	1265562	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-593-1	NZ_CP007357.1	+	4173901	4173953	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-298-1	NZ_CP007523.1	+	221910	221962	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-854-1	NZ_CP007540.1	-	4268937	4268885	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-868-1	NZ_CP007559.1	-	4541938	4541886	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-430-1	NZ_CP007584.1	+	4315734	4315786	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-291-4	NZ_CP011365.1	+	4204324	4204376	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-4-1	NZ_CP011428.1	+	4333576	4333628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-287-1	NZ_CP011396.1	-	4403134	4403082	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-140-1	NZ_CP011394.1	-	4431786	4431734	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-201	NZ_CTCA01000019.1	+	42551	42603	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-202	NZ_CTAB01000019.1	+	42495	42547	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-203	NZ_CTBA01000020.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-204	NZ_CTAL01000022.1	-	45111	45059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-205	NZ_CTAW01000017.1	+	42480	42532	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-206	NZ_CTBZ01000017.1	+	42531	42583	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-207	NZ_CTFZ01000021.1	-	45343	45291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-208	NZ_CTBV01000027.1	+	13413	13465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-209	NZ_CTMW01000030.1	+	13443	13495	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-210	NZ_CTLI01000017.1	+	42508	42560	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-211	NZ_CTGK01000017.1	-	45193	45141	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-300-212	NZ.CTLK01000017.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-213	NZ.CTLM01000019.1	+	42551	42603	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-214	NZ.CTJO01000020.1	+	42453	42505	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-215	NZ.CTII01000017.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-216	NZ.CTJK01000018.1	-	47016	46964	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-217	NZ.CTMC01000020.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-218	NZ.CTHM01000017.1	+	42513	42565	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-219	NZ.CTOO01000018.1	+	42496	42548	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-220	NZ.CTJS01000019.1	-	45135	45083	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-221	NZ.CTGW01000024.1	-	32539	32487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-222	NZ.CTGX01000021.1	-	45124	45072	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-223	NZ.CTOE01000018.1	+	42532	42584	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-224	NZ.CTPM01000019.1	-	45167	45115	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-225	NZ.CTHX01000019.1	-	45107	45055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-226	NZ.CTNC01000019.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-227	NZ.CTGZ01000022.1	+	42532	42584	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-228	NZ.CTMG01000018.1	-	46977	46925	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-229	NZ.CTOY01000017.1	+	42548	42600	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-230	NZ.CTQP01000019.1	+	42536	42588	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-231	NZ.CTNY01000018.1	-	45125	45073	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-232	NZ.CTLY01000020.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-233	NZ.CTFY01000017.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-234	NZ.CTKG01000019.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-235	NZ.CTJU01000017.1	-	45120	45068	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-236	NZ.CTJQ01000018.1	+	42546	42598	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-237	NZ.CTJN01000020.1	+	42551	42603	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-238	NZ.CTPT01000017.1	-	46977	46925	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-239	NZ.CTHU01000018.1	+	42546	42598	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-240	NZ.CTNN01000019.1	-	45136	45084	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-241	NZ.CTND01000017.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-242	NZ.CTHJ01000018.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-243	NZ.CTOG01000010.1	-	37221	37169	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-244	NZ.CTLX01000011.1	+	104185	104237	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-245	NZ.CTQX01000021.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-246	NZ.CTNZ01000020.1	-	45114	45062	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-247	NZ.CTJQ01000016.1	+	42510	42562	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-248	NZ.CTMF01000017.1	+	42505	42557	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-249	NZ.CTHR01000017.1	+	42536	42588	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-250	NZ.CTMK01000017.1	-	45343	45291	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-251	NZ.CTKA01000017.1	-	46977	46925	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-252	NZ.CTOH01000019.1	+	42453	42505	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-253	NZ.CTHB01000017.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-254	NZ.CTLA01000020.1	-	45256	45204	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-255	NZ.CTLR01000017.1	+	42509	42561	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-256	NZ.CTMJ01000019.1	-	45107	45055	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-257	NZ.CTLV01000020.1	-	45179	45127	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-258	NZ.CTHO01000020.1	+	42484	42536	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-259	NZ.CTKD01000016.1	+	42478	42530	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-300-260	NZ.CTMQ01000017.1	+	42438	42490	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-427-1	NZ.CP007211.1	+	217000	217052	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-267-1	NZ.CP007216.1	+	222105	222157	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sen-992-1	NZ.CP007235.1	+	222015	222067	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sen-236-1	NZ_CP007222.1	+	219817	219869	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-273-3	NZ_CP011967.1	+	4083750	4083802	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-135-1	NZ_CP012344.1	-	4536970	4536918	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-276-1	NZ_CP012347.1	-	4534664	4534612	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-272-1	NZ_CP012346.1	-	4305396	4305344	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-281-1	NZ_CP012349.1	-	4562745	4562693	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-622-1	NZ_CP007354.1	+	4173831	4173883	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-643-1	NZ_CP007376.1	+	4173841	4173893	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-653-1	NZ_CP007371.1	+	4173817	4173869	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-261	NZ_CTMM01000027.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-262	NZ_CTPV01000021.1	+	42473	42525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-263	NZ_CTPB01000017.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-264	NZ_CTIJ01000012.1	-	45337	45285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-265	NZ_CTGE01000016.1	-	45343	45291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-266	NZ_CTGM01000017.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-267	NZ_CTQB01000021.1	+	42438	42490	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-268	NZ_CTFX01000018.1	+	42453	42505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-269	NZ_CTGY01000018.1	+	42510	42562	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-270	NZ_CTPK01000017.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-271	NZ_CTOU01000017.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-272	NZ_CTLU01000018.1	+	42484	42536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-273	NZ_CTNW01000020.1	+	42453	42505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-274	NZ_CTNJ01000021.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-275	NZ_CTLP01000019.1	+	42467	42519	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-276	NZ_CTHH01000028.1	-	32546	32494	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-277	NZ_CTIB01000016.1	+	42438	42490	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-278	NZ_CTFV01000017.1	+	42453	42505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-279	NZ_CTPD01000016.1	-	50325	50273	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-280	NZ_CTOF01000017.1	+	42479	42531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-281	NZ_CTOC01000017.1	+	42490	42542	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-282	NZ_CTLK01000017.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-283	NZ_CTML01000016.1	-	45343	45291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-284	NZ_CTPP01000019.1	-	45176	45124	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-285	NZ_CTNH01000018.1	+	42532	42584	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-286	NZ_CTJZ01000017.1	-	45247	45195	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-287	NZ_CTOZ01000017.1	+	42472	42524	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-288	NZ_CTGP01000020.1	-	45343	45291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-289	NZ_CTJM01000019.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-290	NZ_CTNI01000017.1	-	45150	45098	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-291	NZ_CTIF01000021.1	-	45181	45129	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-292	NZ_CTOQ01000016.1	+	42508	42560	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-293	NZ_CTOC01000017.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-294	NZ_CTVJ01000019.1	-	45113	45061	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-295	NZ_CTNL01000027.1	+	22519	22571	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-296	NZ_CTJP01000007.1	+	175854	175906	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-297	NZ_CTNM01000020.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-298	NZ_CTPJ01000020.1	+	42544	42596	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-299	NZ_CTR01000017.1	-	45255	45203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-300	NZ_CTOI01000017.1	+	43122	43174	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-301	NZ_CTPU01000020.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-302	NZ_CTKZ01000020.1	-	45116	45064	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-303	NZ_CTOR01000017.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-300-304	NZ_CTID01000016.1	+	42774	42826	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-305	NZ_CTHC01000020.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-306	NZ_CTGH01000020.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-307	NZ_CTMS01000017.1	+	42506	42558	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-308	NZ_CTHQ01000015.1	-	45343	45291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-309	NZ_CTM01000018.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-310	NZ_CTOI01000027.1	-	32545	32493	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-311	NZ_CTOW01000021.1	-	45197	45145	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-312	NZ_CTLZ01000017.1	+	42531	42583	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-313	NZ_CTKC01000017.1	-	45174	45122	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-314	NZ_CTNU01000017.1	+	42517	42569	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-315	NZ_CTIH01000018.1	-	45343	45291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-316	NZ_CTOT01000019.1	+	42461	42513	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-317	NZ_CTGD01000017.1	+	42532	42584	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-318	NZ_CTOP01000024.1	+	13413	13465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-319	NZ_CTQG01000020.1	+	42499	42551	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-320	NZ_CTJX01000017.1	+	42438	42490	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-321	NZ_CTP01000017.1	-	45199	45147	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-322	NZ_CTNE01000017.1	+	42517	42569	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-323	NZ_CTHK01000017.1	-	45343	45291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-324	NZ_CTHF01000019.1	+	42460	42512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-325	NZ_CTAO01000017.1	-	45255	45203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-326	NZ_CTCH01000021.1	-	45107	45055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-327	NZ_CTBW01000021.1	-	45117	45065	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-328	NZ_CTCE01000019.1	+	42473	42525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-300-329	NZ_CTAC01000018.1	-	45179	45127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-802-1	NZ_AFCR01001558.1	+	1664	1716	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-996-1	NZ_AFCV01001391.1	+	6411	6463	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-734-1	NZ_AFCM01000234.1	-	1925	1873	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-289-1	NZ_LAKIC01000146.1	+	3535	3587	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1025-1	NZ_CAFD01000090.1	-	1029	977	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-439-11	NZ_CSTH01000013.1	-	45242	45190	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-412-1	NZ_CARE01000039.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-229-1	NZ_CBKW020000007.1	+	103767	103819	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-291-7	NZ_LFGV01000021.1	-	4804	4752	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-396-1	NZ_CATT01000048.1	-	37552	37500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-361-1	NZ_CATV01000026.1	-	38256	38204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-238-1	NZ_ARYX01000002.1	+	104268	104320	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-310-1	NZ_ATFA01000012.1	-	37653	37601	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1018-1	NZ_ABFH02000001.1	-	831201	831149	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-936-1	NZ_AYDO01000075.1	-	37705	37653	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1024-1	NZ_AOXE01000061.1	+	25782	25834	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-899-1	NZ_AYEF01000033.1	-	45341	45289	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-61-1	NZ_JRDC01000027.1	-	45217	45165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-50-1	NZ_JRDM01000013.1	+	103447	103499	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-102-1	NZ_JRBQ01000021.1	-	45104	45052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-77-1	NZ_JRCK01000003.1	+	43610	43662	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-27-1	NZ_JREG01000026.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-23-1	NZ_JREK01000016.1	-	45182	45130	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-60-1	NZ_JRDD01000019.1	+	4123	4175	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-109-1	NZ_JRBJ01000021.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-99-1	NZ_JRBS01000026.1	-	45104	45052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-45-1	NZ_JRDQ01000023.1	+	98924	98976	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-74-1	NZ_JRCN01000001.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-75-1	NZ_JRCM01000022.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-110-1	NZ_JRBI01000096.1	-	3356	3304	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-52-1	NZ_JRDK01000048.1	-	45216	45164	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-100-1	NZ_JRBR01000031.1	+	4124	4176	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-70-1	NZ_JRCR01000027.1	-	45104	45052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-71-1	NZ_JRCQ01000018.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-76-1	NZ_JRCL01000003.1	+	104296	104348	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-22-1	NZ_JREL01000019.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-59-1	NZ_JRDE01000031.1	+	4122	4174	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-44-1	NZ_JRDR01000023.1	-	45217	45165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-73-1	NZ_JRCO01000013.1	-	45104	45052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-32-1	NZ_JREC01000027.1	+	103206	103258	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-42-1	NZ_JRDT01000022.1	+	43449	43501	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-47-1	NZ_JRDO01000005.1	+	103439	103491	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-20-1	NZ_JREM01000014.1	-	45104	45052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-37-1	NZ_JRDX01000002.1	-	45196	45144	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-51-1	NZ_JRDL01000012.1	+	103445	103497	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-65-1	NZ_JRCY01000019.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-57-1	NZ_JRDF01000014.1	-	45217	45165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-53-1	NZ_JRDJ01000006.1	+	103457	103509	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-72-1	NZ_JRCP01000025.1	-	45104	45052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-30-1	NZ_JRED01000031.1	+	43390	43442	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-39-1	NZ_JRDV01000026.1	-	45217	45165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-24-1	NZ_JREJ01000027.1	-	45104	45052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-36-1	NZ_JRDY01000016.1	-	45303	45251	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-28-1	NZ_JREF01000014.1	-	45216	45164	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-33-1	NZ_JREB01000019.1	+	4122	4174	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-35-1	NZ_JRDZ01000019.1	+	8320	8372	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-40-1	NZ_JRDU01000022.1	-	45217	45165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-26-1	NZ_JREH01000017.1	+	8335	8387	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-108-1	NZ_JRBK01000010.1	+	103451	103503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-56-1	NZ_JRDG01000018.1	-	45217	45165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-105-1	NZ_JRBN01000053.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-68-1	NZ_JRCS01000047.1	-	45095	45043	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-79-1	NZ_JRCI01000083.1	-	1205	1153	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-90-1	NZ_JRBZ01000014.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-94-1	NZ_JRBV01000025.1	+	103450	103502	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-96-1	NZ_JRBU01000019.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-85-1	NZ_JRCD01000010.1	+	103451	103503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-925-1	NZ_LAOYK01000093.1	+	42029	42081	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-107-1	NZ_JRBL01000010.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-54-1	NZ_JRDI01000020.1	-	45217	45165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-55-1	NZ_JRDH01000008.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-104-1	NZ_JRBO01000052.1	+	15512	15564	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-67-1	NZ_JRCT01000026.1	-	45173	45121	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-78-1	NZ_JRCJ01000053.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-93-1	NZ_JRBW01000021.1	+	55522	55574	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-34-1	NZ_JREA01000027.1	+	103445	103497	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-43-1	NZ_JRDS01000015.1	+	103420	103472	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-82-1	NZ_JRCF01000015.1	+	103451	103503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sen-84-1	NZ_JRCE01000022.1	+	103451	103503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-48-1	NZ_JRDN01000019.1	-	45217	45165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-64-1	NZ_JRCZ01000043.1	+	4122	4174	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-292-1	NZ_JHAG01000043.1	+	42429	42481	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-63-1	NZ_JRDA01000002.1	+	103469	103521	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-66-1	NZ_JRCW01000065.1	+	4122	4174	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-103-1	NZ_JRBP01000017.1	+	4123	4175	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-92-1	NZ_JRBX01000004.1	-	45104	45052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-81-1	NZ_JRCG01000038.1	+	4122	4174	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-87-1	NZ_JRCB01000003.1	+	103451	103503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-88-1	NZ_JRCA01000012.1	+	103451	103503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-462-1	NZ_APAG01000166.1	+	96846	96898	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-766-1	NZ_AMMP01000013.1	+	4125	4177	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-62-1	NZ_JRDB01000008.1	+	103327	103379	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-25-1	NZ_JREI01000009.1	-	45213	45161	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-38-1	NZ_JRDW01000021.1	+	103444	103496	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-106-1	NZ_JRBM01000066.1	+	43379	43431	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-46-1	NZ_JRDP01000018.1	-	9628	9576	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-91-1	NZ_JRBY01000004.1	+	103450	103502	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-29-1	NZ_JREE01000016.1	+	103448	103500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-97-1	NZ_JRBT01000001.1	+	103451	103503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-80-1	NZ_JRCH01000029.1	+	103451	103503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-86-1	NZ_JRCC01000044.1	+	43272	43324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-101-1	NZ_JRLO01000034.1	-	45105	45053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-83-1	NZ_JRLQ01000100.1	+	4123	4175	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-2-2	NZ_JTBM01000001.1	-	3487697	3487645	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-295-1	NZ_JTED01000011.1	-	45184	45132	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-3-1	NC_021870.1	+	4124212	4124264	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-4-1	NC_015761.1	+	3964037	3964089	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-1-1	NZ_CP006692.1	+	3836915	3836967	rpmE (PRK00019)Ribosomal_L31 (pfam01197) → RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1029-1	NZ_ABEH02000008.1	+	207232	207284	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-783-1	NZ_AHUW01000041.1	-	44329	44277	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-785-1	NZ_AOZB01000105.1	+	102730	102782	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-784-1	NC_020307.1	-	2717973	2717921	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1021-1	NZ_AOXJ01000015.1	-	34309	34257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1020-1	NZ_ANHR01000083.1	+	63387	63439	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1022-1	NZ_CM001471.1	+	4136164	4136216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-1019-1	NZ_JWSP01000004.1	+	1022116	1022064	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sen-312-1	NZ_APAC01000103.1	-	85432	85484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Bag-1-1	NZ_JPRU01000006.1	-	38990	38938	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-757	JGI26054J46599_1163256	+	160	212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Stu-1-1	NZ_AWFZ01000002.1	+	111257	111309	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ctu-2-1	NZ_AXDM01000005.1	-	25734	25682	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ctu-1-1	NZ_AVPP01000003.1	+	47207	47259	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-3-1	NZ_CP007557.1	+	1495160	1495212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ksp-3-1	NZ_LGIT01000007.1	-	29099	29047	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1011-1	NZ_AQCZ01000115.1	+	23399	23451	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-758	BAAV01033320.1	+	305	357	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-759	BAAW01007240.1	-	565	513	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-760	BAAW01011360.1	+	754	806	RNA → ← hypō
env-761	BABF01001643.1	-	1445	1393	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-762	AEQT01000001.1	+	88843	88895	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-5-1	NZ_BBMV01000030.1	-	35429	35377	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cpa-1-1	NZ_CDHL01000043.1	-	29572	29520	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-11-1	NZ_AOUE01000017.1	+	87594	87646	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-16-1	NZ_AKTT01000023.1	+	87561	87613	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-2-2	NZ_ANAV01000016.1	+	78413	78465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-2-1	NZ_JMTA01000012.1	+	78415	78467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-6-1	NZ_JATT01000019.1	+	78434	78486	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-7-1	NZ_KI929269.1	+	4901833	4901885	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-18-1	NZ_KB976057.1	+	90814	90866	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-10-1	NZ_AOMS01000029.1	-	35491	35439	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-1-1	NZ_CP011657.1	-	2678236	2678184	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-1-2	NZ_CP011612.1	+	3379319	3379371	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-6-1	NZ_KQ089819.1	-	838497	838445	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-11-1	NZ_KQ089794.1	-	242684	242632	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-5-1	NZ_KQ089814.1	+	89593	89645	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-4-1	NZ_KQ089805.1	-	35482	35430	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-2-1	NZ_KQ089848.1	-	2277940	2277888	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-9-1	NZ_KQ089838.1	-	444760	444708	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-20-1	NZ_AMPE01000010.1	+	87560	87612	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-1-3	NZ_JTBJ01000001.1	+	4640958	4641010	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1781-1	NZ_ASHB01000053.1	+	32271	32323	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cam-1-1	NZ_LAMY01000136.1	+	29848	29900	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-48-1	NZ_LEDLM01000004.1	-	45562	45510	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cbr-1-1	NZ_JUKU01000045.1	+	60235	60287	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cbr-1-2	NZ_JWAG01000048.1	+	60248	60300	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cbr-1-3	NZ_JUYY01000053.1	+	60968	61020	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cbr-1-4	NZ_JULD01000069.1	-	27815	27763	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-15-1	NZ_KI391987.1	-	39609	39557	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-8-1	NZ_KI929267.1	+	90664	90716	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-19-1	NZ_KB976073.1	+	200071	200123	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-17-1	NZ_KB976068.1	+	125011	125063	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-3-1	NZ_KQ089873.1	+	62426	62478	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-10-1	NZ_KQ089833.1	-	40759	40707	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → KdgM (pfam06178) →
Csp-7-1	NZ_KQ089824.1	-	2325449	2325397	MelB (COG2211)gph (TIGR00792) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cbr-1-5	NZ_JRHL01000001.1	-	2295239	2295187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cbr-1-6	NZ_JRHK01000001.1	+	107410	107462	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-2	NZ_CWTS01000028.1	+	39051	39103	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-70-1	NZ_AKMW01000069.1	-	54097	54045	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-71-1	NZ_AERO010000112.1	-	1241	1189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-390-1	NZ_HG977162.1	+	91704	91756	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-69-1	NZ_LAJR01000096.1	-	1240	1188	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-20-2	NZ_LDEG01000011.1	-	34084	34032	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-9-1	NZ_JH414877.1	-	39489	39437	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-4-1	NZ_KK736169.1	+	94576	94628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfr-1-4	NZ_JTBV01000001.1	-	898514	898462	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1460-1	NZ_KB732916.1	+	3520416	3520468	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-763	DLM009_scaffold16386.3	+	718	770	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-764	NLF015_scaffold22851.1	-	263	211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-765	NOM004_scaffold4453.6	+	1622	1674	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1383-1	NZ_CBWB010000190.1	+	91974	92026	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-325-1	NZ_KK214157.1	+	92332	92384	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-316-1	NZ_KK736352.1	+	92567	92619	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-305-1	NZ_KI929660.1	+	3035802	3035854	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-296-1	NZ_KI929714.1	+	4459892	4459944	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-302-1	NZ_KI929774.1	-	205100	205048	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-304-1	NZ_KI929668.1	-	97421	97369	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-310-1	NZ_KI929804.1	+	4463923	4463975	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-298-1	NZ_KI929698.1	-	639989	639937	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-297-1	NZ_KI929706.1	-	636775	636723	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-299-1	NZ_KI929690.1	+	1502179	1502231	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-327-1	NZ_KI929758.1	+	93576	93628	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-303-1	NZ_KI929771.1	+	92568	92620	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-295-1	NZ_KI929738.1	+	206307	206359	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1015-1	NZ_AXLi01000001.1	+	4460664	4460716	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-258-1	NZ_AYQW01000048.1	-	687	635	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1647-1	NZ_AYNI01000026.1	-	938	886	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1646-1	NZ_AYNH01000020.1	-	922	870	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-428-1	NZ_JDVF01000018.1	-	52260	52208	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cwe-1-1	NZ_BBMW01000019.1	-	35233	35181	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-3	NZ_CWSV01000068.1	+	20842	20894	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-766	BABF01000073.1	-	6870	6818	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-767	scaffold134588.2.MH0012	+	210	262	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-768	4491407.3.NODE_4519	-	2364	2312	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-769	longitudinal.136.11	+	77179	77231	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-770	longitudinal.137.363	+	76993	77045	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-771	longitudinal.138.145	+	77051	77103	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-772	longitudinal.382.105	+	76965	77017	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-773	longitudinal.383.30	-	52083	52031	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-774	longitudinal.476.25	-	52085	52033	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-775	longitudinal.477.11	-	18180	18128	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-776	longitudinal.478.15	+	7304	7356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-777	longitudinal.479.7	-	52071	52019	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-778	longitudinal.480.186	+	93226	93278	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-779	longitudinal.481.108	+	76967	77019	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-780	longitudinal.523.386	+	775	827	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-781	SRS012273_Baylor_scaffold.27707	-	310	258	RNA → ← hyp0
env-782	SRS013687_C2419310	+	106	158	RNA → ← hyp0
env-783	SRS064276_LANL_scaffold.67167	+	192	244	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1069-1	NZ_AIFH01000083.1	+	95460	95512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-932-1	NZ_ANME01000140.1	+	91944	91996	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1953-1	NZ_AOEL01000099.1	+	92477	92529	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1949-1	NZ_AOEk01000130.1	+	91968	92020	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-943-1	NZ_AOEq01000149.1	+	91698	91750	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-935-1	NZ_AODY01000196.1	+	94220	94272	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1977-1	NZ_AOEO01000117.1	+	44640	44692	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1075-1	NZ_AIFN01000076.1	+	96431	96483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-941-1	NZ_AOER01000130.1	+	88384	88436	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-939-1	NZ_AOEC01000217.1	+	88385	88437	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1972-1	NZ_AOEM01000150.1	+	44656	44708	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-736-1	NZ_JWZW01000013.1	-	52488	52436	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1802-1	NZ_ABHT01000011.1	-	47240	47188	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1800-1	NZ_ABHR01000009.1	+	96825	96877	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1794-1	NZ_ABHQ01000006.1	+	210561	210613	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1795-1	NZ_ABHP01000009.1	-	47048	46996	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1804-1	NZ_ABHU01000005.1	+	261003	261055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1803-1	NZ_ABHW01000012.1	-	47087	47035	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1801-1	NZ_ABHS01000007.1	+	209927	209979	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-859-1	NZ_AMTN01000126.1	+	91910	91962	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-937-1	NZ_AOEA01000208.1	+	94248	94300	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-940-1	NZ_AOED01000229.1	+	93715	93767	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-569-1	NZ_ASHA01000104.1	-	486	434	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1798-1	NZ_ABHO01000013.1	-	49906	49854	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1792-1	NZ_ABHM02000001.1	+	3295143	3295195	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-346-1	NZ_AIAR01000054.1	-	5358	5306	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-574-1	NZ_LAZD01000064.1	-	557	505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-574-2	NZ_LCWU01000211.1	+	17316	17368	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-574-3	NZ_LAYW01000197.1	-	556	504	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-4	NZ_CWTD01000021.1	-	555	503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-380-1	NZ_AIBY01000120.1	-	485	433	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-351-1	NZ_AIAW01000183.1	-	706	654	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-757-1	NZ_AVRIO1000125.1	+	46581	46633	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-979-1	NZ_AVQW01000112.1	+	91931	91983	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-984-1	NZ_AVRA01000101.1	+	91696	91748	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-962-1	NZ_AVQS01000121.1	+	94248	94300	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-977-1	NZ_AVQU01000053.1	+	95584	95636	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1998-1	NZ_AVRN01000113.1	+	91692	91744	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-978-1	NZ_AVQV01000003.1	+	96537	96589	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-967-1	NZ_AVQT01000050.1	+	96695	96747	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-982-1	NZ_AVQZ01000113.1	+	91945	91997	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-772-1	NZ_AVRQ01000125.1	+	94905	94957	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-985-1	NZ_AVRB01000098.1	+	91952	92004	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-981-1	NZ_AVRY01000110.1	+	91935	91987	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1997-1	NZ_AVRM01000138.1	+	44627	44679	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-991-1	NZ_AVRC01000046.1	+	94622	94674	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1002-1	NZ_AVRF01000049.1	+	96837	96889	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-995-1	NZ_AVSH01000114.1	+	92149	92201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-965-1	NZ_AVRU01000122.1	+	44646	44698	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-760-1	NZ_AVQR01000061.1	+	94786	94838	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1999-1	NZ_AVRO01000114.1	+	29667	29719	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-966-1	NZ_AVRV01000107.1	+	92178	92230	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-990-1	NZ_AVSG01000112.1	+	91949	92001	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-963-1	NZ_AVRS01000114.1	+	91671	91723	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-970-1	NZ_AVRY01000117.1	+	94217	94269	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-997-1	NZ_AVSJ01000120.1	+	93623	93675	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1003-1	NZ_AVRG01000051.1	+	95891	95943	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-992-1	NZ_AVRD01000047.1	+	96895	96947	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-964-1	NZ_AVRT01000114.1	+	94254	94306	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-969-1	NZ_AVRX01000111.1	+	92141	92193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-972-1	NZ_AVSA01000108.1	+	93637	93689	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-968-1	NZ_AVRW01000116.1	+	44654	44706	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1000-1	NZ_AVSM01000111.1	+	93633	93685	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-999-1	NZ_AVSL01000116.1	+	92472	92524	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-998-1	NZ_AVSK01000131.1	+	91687	91739	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-987-1	NZ_AVSE01000119.1	+	44642	44694	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-974-1	NZ_AVSC01000008.1	-	4109	4057	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-758-1	NZ_AVRJ01000121.1	+	94936	94988	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-448-1	NZ_AWPR01000018.1	+	91639	91691	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-759-1	NZ_AVRK01000132.1	+	46570	46622	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-449-1	NZ_AWPS01000020.1	+	91641	91693	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-437-1	NZ_AWQC01000422.1	+	91641	91693	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-1001-1	NZ_AVRE01000043.1	+	94898	94950	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-447-1	NZ_AWPQ01000136.1	+	91638	91690	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-438-1	NZ_AWQD01000028.1	+	91639	91691	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-432-1	NZ_AWPX01000127.1	+	12748	12800	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-433-1	NZ_AWPY01000116.1	+	12746	12798	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-421-1	NZ_AWQJ0100017.1	+	91639	91691	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-430-1	NZ_AWPV01000015.1	+	12744	12796	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-451-1	NZ_AWPU01000098.1	+	12748	12800	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-434-1	NZ_AWPZ01000093.1	+	19850	19902	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-750-1	NZ_AWQO01000113.1	+	12748	12800	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-440-1	NZ_AWPN01000045.1	+	12746	12798	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-439-1	NZ_AWQE01000031.1	+	91641	91693	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-444-1	NZ_AWQI01000063.1	+	12748	12800	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-436-1	NZ_AWQB01000157.1	+	12747	12799	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-435-1	NZ_AWQA01000092.1	+	12748	12800	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-747-1	NZ_AWQL01000099.1	+	12748	12800	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-749-1	NZ_AWQN01000168.1	+	12746	12798	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-748-1	NZ_AWQM01000034.1	+	12748	12800	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-443-1	NZ_AWQH01000004.1	+	2951	3003	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-278-1	NZ_AIAK01000020.1	-	1021	969	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-980-1	NZ_AVQX01000117.1	+	92014	92066	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-973-1	NZ_AVSB01000121.1	-	4116	4064	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-2045-1	NZ_AVSO01000133.1	+	94217	94269	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-986-1	NZ_AVSD01000125.1	+	92039	92091	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-996-1	NZ_AVSI01000127.1	+	94242	94294	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-1023-1	NZ_AVRL01000126.1	+	91700	91752	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-2000-1	NZ_AVRP01000114.1	+	94245	94297	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-971-1	NZ_AVRZ01000117.1	+	94219	94271	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-989-1	NZ_AVSF01000119.1	+	44639	44691	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-2036-1	NZ_AKLW01000069.1	+	95016	95068	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-1968-1	NZ_AKLQ01000060.1	+	23530	23582	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-2031-1	NZ_AKLV01000044.1	+	95383	95435	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-1791-1	NZ_ADMX01000127.1	+	91609	91661	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-1805-1	NZ_ACXO01000010.1	+	30986	31038	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-620-1	NZ_ADVC01000558.1	+	91610	91662	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-1790-1	NZ_AERQ01000011.1	-	879247	879195	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-1788-1	NZ_AERP01000068.1	-	47614	47562	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-605-1	NZ_JHKM01000001.1	+	91629	91681	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-579-1	NZ_JHKZ01000005.1	-	451	399	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-598-1	NZ_JHKT01000066.1	+	91629	91681	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-622-1	NZ_JHJT01000041.1	+	91630	91682	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-624-1	NZ_JHJP01000049.1	-	450	398	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-586-1	NZ_JHGD01000027.1	+	18891	18943	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-582-1	NZ_JHHI01000057.1	+	91627	91679	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-609-1	NZ_JHKI01000039.1	-	451	399	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→
Eco-1787-1	NZ_JJOM01000126.1	+	10323	10375	RNA	→	rpmE (PRK00019)	Ribosomal_L31 (pfam01197)	→

Eco-616-1	NZ_JHKB01000029.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-603-1	NZ_JHKO01000068.1	+	91629	91681	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-607-1	NZ_JHKK01000018.1	+	91629	91681	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-580-1	NZ_JHKY01000056.1	-	451	399	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2028-1	NZ_AKLY01000063.1	+	95632	95684	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-623-1	NZ_JHJQ01000008.1	+	91629	91681	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-629-1	NZ_JHJK01000015.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-627-1	NZ_JHJM01000040.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-617-1	NZ_JHKA01000046.1	+	91629	91681	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1067-1	NZ_AIF01000060.1	+	96859	96911	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-611-1	NZ_JHKG01000053.1	+	91627	91679	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-626-1	NZ_JHJN01000046.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1954-1	NZ_AKLI01000067.1	+	93083	93135	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-618-1	NZ_ADUZ01000101.1	+	19096	19148	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2030-1	NZ_AKMA01000052.1	+	92700	92752	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-587-1	NZ_JHGC01000018.1	-	889	837	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-604-1	NZ_JHKN01000014.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-628-1	NZ_JHJL01000028.1	+	91627	91679	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-625-1	NZ_JHJO01000073.1	+	91629	91681	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1786-1	NZ_JJOL01000613.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1797-1	NZ_ADVA01000255.1	-	430	378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-614-1	NZ_JHKD01000047.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-933-1	NZ_ANMF01000102.1	+	92081	92133	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-602-1	NZ_JHKP01000022.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-764-1	NZ_AMTO01000096.1	+	92142	92194	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-615-1	NZ_JHKC01000036.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-583-1	NZ_JHGQ01000004.1	+	23860	23912	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-584-1	NZ_JHGF01000028.1	+	91945	91997	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-575-1	NZ_JHNI01000046.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1806-1	NZ_ACXN01000137.1	+	91610	91662	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1072-1	NZ_AIF01000050.1	+	26780	26832	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1077-1	NZ_AIFP01000064.1	+	96827	96879	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-639-1	NZ_JHJA01000020.1	+	91780	91832	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-636-1	NZ_JHJD01000062.1	+	28264	28316	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-644-1	NZ_JHIV01000025.1	-	385	333	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-647-1	NZ_JHIS01000020.1	-	1165	1113	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-653-1	NZ_JHIM01000108.1	-	1167	1115	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-660-1	NZ_JHID01000024.1	+	91933	91985	RNA →
Eco-665-1	NZ_JHHY01000031.1	+	91851	91903	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-673-1	NZ_JHHH01000049.1	+	91629	91681	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-635-1	NZ_JHJF01000046.1	-	686	634	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1115-1	NZ_AKMN01000055.1	+	94670	94722	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-633-1	NZ_JHJH01000029.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-640-1	NZ_JHIZ01000031.1	+	90872	90924	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-641-1	NZ_JHIY01000023.1	+	90756	90808	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-648-1	NZ_JHIR01000036.1	+	91660	91712	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-645-1	NZ_JHIU01000032.1	-	1552	1500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-421-2	NZ_JQFE01000162.1	-	5435	5383	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-655-1	NZ_JHII01000022.1	-	1206	1154	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-661-1	NZ_JHIC01000130.1	+	91932	91984	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-666-1	NZ_JHHX01000127.1	+	80205	80257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-667-1	NZ_JHHW01000029.1	+	92008	92060	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-652-1	NZ_JHIN01000027.1	+	91794	91846	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-637-1	NZ_JHJC01000021.1	-	1444	1392	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1111-1	NZ_AKMO01000049.1	+	92352	92404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-642-1	NZ_JHIX01000008.1	+	38907	38959	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-649-1	NZ_JHIQ01000016.1	+	92060	92112	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1074-1	NZ_AIFM01000051.1	+	29971	30023	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-646-1	NZ_JHIT01000029.1	+	92053	92105	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-656-1	NZ_JHIH01000027.1	+	91457	91509	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-662-1	NZ_JHIB01000019.1	-	617	565	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-421-3	NZ_JQFC01000080.1	-	5475	5423	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-659-1	NZ_JHIE01000023.1	+	92013	92065	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-669-1	NZ_JHHK01000045.1	+	91704	91756	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-668-1	NZ_JHHV01000025.1	-	1045	993	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-421-4	NZ_JQFH01000455.1	-	9813	9761	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-631-1	NZ_JHJI01000008.1	-	451	399	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1710-1	NZ_AJMD01000038.1	+	191195	191247	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-634-1	NZ_JHJG01000006.1	+	91629	91681	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-638-1	NZ_JHJB01000094.1	+	20677	20729	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-643-1	NZ_JHIW01000024.1	-	648	596	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-650-1	NZ_JHIP01000024.1	-	1458	1406	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-651-1	NZ_JHIO01000024.1	+	91973	92025	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-654-1	NZ_JHIL01000021.1	+	92073	92125	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-657-1	NZ_JHIG01000029.1	+	91857	91909	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-658-1	NZ_JHIF01000022.1	-	702	650	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-663-1	NZ_JHIA01000018.1	+	30623	30675	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1070-1	NZ_AIFI01000086.1	+	95517	95569	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1076-1	NZ_AIFO01000059.1	+	96837	96889	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-672-1	NZ_JJOK01000008.1	-	429	377	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-619-1	NZ_ADUX01000057.1	+	91609	91661	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1976-1	NZ_AMTQ01000001.1	+	95107	95159	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-613-1	NZ_JHKE01000012.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-592-1	NZ_JHLG01000045.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-593-1	NZ_JHLF01000079.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-595-1	NZ_JHLD01000027.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-610-1	NZ_JHKK01000027.1	+	91881	91933	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-597-1	NZ_JHLB01000049.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2164-1	NZ_AEYT01000045.1	+	77041	77093	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1799-1	NZ_ABHK02000001.1	+	2307056	2307108	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-608-1	NZ_JHKJ01000002.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-600-1	NZ_JHKR01000082.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-594-1	NZ_JHLE01000058.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-596-1	NZ_JHLC01000006.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-601-1	NZ_JHKQ01000035.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-591-1	NZ_JHLH01000025.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1793-1	NZ_ABHL02000001.1	+	2175397	2175449	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-606-1	NZ_JHKL01000031.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-599-1	NZ_JHKS01000060.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1789-1	NZ_AERR01000025.1	+	95838	95890	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-589-1	NZ_JHLK01000122.1	-	1188	1136	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-581-1	NZ_JHKW01000036.1	+	91629	91681	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-231-1	NZ_AYQU01000019.1	-	32637	32585	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-577-1	NZ_JHNF01000058.1	+	91629	91681	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-578-1	NZ_JHNE01000052.1	+	91627	91679	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-570-1	NZ_JHME01000049.1	+	44021	44073	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-576-1	NZ_JHNG01000027.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-585-1	NZ_JHGE01000017.1	+	91918	91970	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-590-1	NZ_JHLI01000054.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-630-1	NZ_AVCD01000005.1	+	2518806	2518858	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-293-1	NZ_AYGW02000101.1	+	91627	91679	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-445-1	NZ_AWPO01000180.1	+	49800	49852	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1809-1	NC_002695.1	+	4928446	4928498	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2156-1	NC_007946.1	+	4403952	4404004	RNA → ←-hypō
Eco-1496-1	NZ_ANYQ01000052.1	+	77161	77213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-944-1	NZ_AOEF01000177.1	+	94253	94305	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-930-1	NZ_AOEV01000127.1	+	46610	46662	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1810-1	NC_013008.1	+	4987619	4987671	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1381-1	NC_017628.1	+	4516074	4516126	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2046-1	NC_017632.1	+	4145232	4145284	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1796-1	NC_011353.1	+	5031559	5031611	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2162-1	NC_017906.1	+	4855185	4855237	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-950-1	NC_008563.1	+	4435966	4436018	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-670-1	NZ_CP008805.1	+	4983353	4983405	rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1785-1	NC_002655.2	+	4997210	4997262	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1811-1	NZ_CM000662.1	-	1831197	1831145	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1679-1	NZ_GL772990.1	-	52128	52076	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-913-1	NZ_KB001687.1	+	91681	91733	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-912-1	NZ_KB001158.1	+	91691	91743	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-916-1	NZ_KB003763.1	+	91671	91723	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-868-1	NZ_KB007262.1	+	91757	91809	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-906-1	NZ_KB005335.1	+	91753	91805	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-872-1	NZ_KB006068.1	+	88410	88462	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-870-1	NZ_KB006781.1	+	91761	91813	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-910-1	NZ_KB002140.1	+	88458	88510	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-922-1	NZ_KB003073.1	+	91734	91786	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-314-1	NZ_KK736334.1	+	79261	79313	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1172-1	NZ_GL871984.1	-	52350	52298	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1174-1	NZ_GL896790.1	-	2228748	2228696	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1171-1	NZ_GL871899.1	+	77435	77487	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1175-1	NZ_JH590476.1	-	52676	52624	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1957-1	NZ_JH706532.1	+	91681	91733	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1160-1	NZ_JH698273.1	+	91691	91743	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1959-1	NZ_JH711380.1	+	91753	91805	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1138-1	NZ_JH696208.1	+	91679	91731	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1969-1	NZ_JH703729.1	+	91757	91809	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1975-1	NZ_JH709966.1	+	91759	91811	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1956-1	NZ_JH707511.1	+	91755	91807	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1970-1	NZ_JH703250.1	+	91689	91741	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1137-1	NZ_JH696593.1	+	91681	91733	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-904-1	NZ_JH710989.1	+	91681	91733	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2026-1	NZ_JH702793.1	+	91750	91802	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1958-1	NZ_JH706083.1	+	91685	91737	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1154-1	NZ_JH692587.1	+	91689	91741	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2027-1	NZ_JH702437.1	+	91680	91732	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1960-1	NZ_JH707064.1	+	91761	91813	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1961-1	NZ_JH705659.1	+	91683	91735	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1962-1	NZ_JH705097.1	+	91689	91741	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1966-1	NZ_JH704534.1	+	8213	8265	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1124-1	NZ_JH692963.1	+	91755	91807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1978-1	NZ_JH709459.1	+	91686	91738	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1132-1	NZ_JH698686.1	+	91751	91803	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1139-1	NZ_JH694736.1	+	91686	91738	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1135-1	NZ_JH699668.1	+	91685	91737	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-2039-1	NZ_JH695371.1	+	8219	8271	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1116-1	NZ_JH693435.1	+	91685	91737	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1141-1	NZ_JH697067.1	+	91685	91737	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1140-1	NZ_JH694330.1	+	91750	91802	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1134-1	NZ_JH699178.1	+	88425	88477	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1963-1	NZ_JH964280.1	+	91688	91740	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1120-1	NZ_JH953686.1	+	91679	91731	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1713-1	NZ_JH957915.1	+	91763	91815	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1153-1	NZ_JH962205.1	+	91766	91818	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1967-1	NZ_JH960930.1	-	90108	90056	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1971-1	NZ_JH959095.1	+	91691	91743	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1657-1	NZ_JH957193.1	+	87134	87186	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1155-1	NZ_JH964868.1	+	91806	91858	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1025-1	NZ_JH956755.1	+	86912	86964	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1112-1	NZ_JH958301.1	+	91756	91808	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-765-1	NZ_JH969496.1	+	91753	91805	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1156-1	NZ_JH963939.1	+	91765	91817	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1162-1	NZ_JH962614.1	+	91689	91741	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1114-1	NZ_JH963514.1	+	88419	88471	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1121-1	NZ_JH953257.1	+	91761	91813	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-847-1	NZ_JH971373.1	+	91765	91817	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1965-1	NZ_JH966096.1	+	88442	88494	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-754-1	NZ_JH943323.1	+	91763	91815	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1163-1	NZ_JH961354.1	+	91823	91875	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1117-1	NZ_JH956301.1	+	91755	91807	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-838-1	NZ_JH970961.1	+	91677	91729	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-2021-1	NZ_JH957502.1	+	91767	91819	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1119-1	NZ_JH955815.1	+	91687	91739	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1129-1	NZ_JH947101.1	+	91763	91815	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-856-1	NZ_JH970471.1	+	91687	91739	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1955-1	NZ_JH959984.1	+	91758	91810	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1113-1	NZ_JH965229.1	+	91684	91736	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1122-1	NZ_JH952871.1	+	91691	91743	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1123-1	NZ_JH952449.1	+	91753	91805	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1118-1	NZ_JH963066.1	+	91753	91805	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1712-1	NZ_JH946694.1	+	91677	91729	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-865-1	NZ_JH968340.1	+	91746	91798	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1127-1	NZ_JH944307.1	+	91687	91739	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-918-1	NZ_KB002678.1	+	91681	91733	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-866-1	NZ_KB006465.1	+	91685	91737	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-924-1	NZ_JH999841.1	+	93668	93720	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-863-1	NZ_JH969035.1	+	91747	91799	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1125-1	NZ_JH946246.1	+	88431	88483	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Eco-908-1	NZ_KB005700.1	+	91689	91741	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-919-1	NZ_KB000775.1	+	88442	88494	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-905-1	NZ_KB004122.1	+	91687	91739	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-929-1	NZ_KB004465.1	+	5425	5477	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-867-1	NZ_KB000427.1	-	91685	91737	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-931-1	NZ_KB004956.1	-	85517	85465	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1589-1	NZ_KB732234.1	+	199572	199624	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1284-1	NZ_KE700830.1	+	3082190	3082242	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1363-1	NZ_KE699552.1	+	1425559	1425611	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1193-1	NZ_KE699732.1	+	80106	80158	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1215-1	NZ_KE700025.1	+	3022754	3022806	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1299-1	NZ_KE700948.1	+	80532	80584	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2064-1	NZ_KE701659.1	+	2188141	2188193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2090-1	NZ_KE702030.1	+	1589080	1589132	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1310-1	NZ_KE701076.1	+	81617	81669	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1265-1	NZ_KE700589.1	+	80503	80555	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1288-1	NZ_KE700850.1	+	4139451	4139503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1281-1	NZ_KE700802.1	+	82469	82521	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2132-1	NZ_KE702477.1	+	721545	721597	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1305-1	NZ_KE701022.1	+	429776	429828	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1398-1	NZ_KE701238.1	+	81941	81993	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1277-1	NZ_KE700778.1	+	2969295	2969347	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2050-1	NZ_KE701458.1	+	4128279	4128331	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1290-1	NZ_KE700866.1	+	3081361	3081413	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1207-1	NZ_KE699929.1	+	81923	81975	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1276-1	NZ_KE700763.1	+	40914	40966	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2129-1	NZ_KE702454.1	+	3004717	3004769	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2089-1	NZ_KE702022.1	+	82164	82216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2145-1	NZ_KE702629.1	-	52361	52309	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2147-1	NZ_KE702650.1	+	2279303	2279355	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1224-1	NZ_KE700110.1	+	3032185	3032237	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1298-1	NZ_KE700927.1	+	81739	81791	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1256-1	NZ_KE700501.1	+	1510971	1511023	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2074-1	NZ_KE701779.1	+	81844	81896	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2138-1	NZ_KE702517.1	+	81885	81937	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2109-1	NZ_KE702295.1	+	202832	202884	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1191-1	NZ_KE747793.1	+	1499856	1499908	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-441-1	NZ_KI303532.1	+	91677	91729	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-422-1	NZ_KI303976.1	+	91676	91728	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-442-1	NZ_KI303614.1	+	119771	119823	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-446-1	NZ_KI302222.1	+	91843	91895	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-431-1	NZ_KI302783.1	+	79232	79284	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1566-1	NZ_KE136719.1	+	78966	79018	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1235-1	NZ_KI538716.1	+	1125873	1125925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1263-1	NZ_KI538784.1	+	1554820	1554872	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1209-1	NZ_KI538675.1	+	3015588	3015640	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1302-1	NZ_KI669364.1	+	77079	77131	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-307-1	NZ_KI929791.1	+	2901756	2901808	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-306-1	NZ_KI929797.1	+	2884603	2884655	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-761-1	NZ_KB453217.1	+	91679	91731	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1598-1	NZ_KB732740.1	+	81850	81902	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1599-1	NZ_KB733044.1	+	202007	202059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1595-1	NZ_KB732701.1	+	77074	77126	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1542-1	NZ_KB733023.1	+	4117024	4117076	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1627-1	NZ_KB733107.1	+	91628	91680	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1552-1	NZ_KB733235.1	+	3048568	3048620	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1603-1	NZ_KB732751.1	-	1572177	1572125	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1606-1	NZ_KB733066.1	+	3009872	3009924	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1433-1	NZ_KB733111.1	+	201057	201109	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1578-1	NZ_KB732224.1	+	200445	200497	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1439-1	NZ_KB733071.1	+	1502061	1502113	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1550-1	NZ_KB733358.1	+	391531	391583	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1569-1	NZ_KE136581.1	+	2924005	2924057	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1611-1	NZ_KE136591.1	+	1576213	1576265	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1563-1	NZ_KE137004.1	+	4441094	4441146	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1274-1	NZ_KE698996.1	+	82952	83004	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1341-1	NZ_KE698838.1	+	202726	202778	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1359-1	NZ_KE699460.1	+	1555547	1555599	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1348-1	NZ_KE699341.1	+	38316	38368	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1357-1	NZ_KE699437.1	+	1585903	1585955	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1188-1	NZ_KE698778.1	+	746991	747043	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1327-1	NZ_KE699160.1	+	205160	205212	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1325-1	NZ_KE699137.1	+	196255	196307	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1340-1	NZ_KE699296.1	+	79965	80017	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1322-1	NZ_KE698817.1	+	223232	223284	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1323-1	NZ_KE699123.1	+	204897	204949	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1335-1	NZ_KE699242.1	+	741196	741248	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1214-1	NZ_KE700005.1	-	52165	52113	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1951-1	NZ_JH708009.1	+	91689	91741	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1159-1	NZ_JH710487.1	+	91681	91733	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1947-1	NZ_JH709052.1	+	91683	91735	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1136-1	NZ_JH697709.1	+	91677	91729	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1142-1	NZ_JH693924.1	+	91683	91735	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1157-1	NZ_JH701983.1	+	91683	91735	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1950-1	NZ_JH708588.1	+	91759	91811	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-2029-1	NZ_JH700687.1	+	8195	8247	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1130-1	NZ_JH945202.1	+	91757	91809	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1711-1	NZ_JH960537.1	+	91749	91801	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1128-1	NZ_JH944742.1	+	88417	88469	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-917-1	NZ_KB009442.1	+	91687	91739	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-871-1	NZ_KB007779.1	+	88442	88494	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-926-1	NZ_KB008854.1	+	88429	88481	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1161-1	NZ_JH961766.1	+	91689	91741	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1164-1	NZ_JH943934.1	+	91767	91819	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-862-1	NZ_JH970100.1	+	91671	91723	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1974-1	NZ_JH959572.1	+	91693	91745	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-839-1	NZ_AOET01000116.1	+	91981	92033	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1498-1	NZ_ANYR01000076.1	+	77184	77236	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-953-1	NZ_AOEH01000082.1	-	4113	4061	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1493-1	NZ_ANYO01000058.1	+	29022	29074	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-938-1	NZ_AOEB01000174.1	+	23013	23065	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1952-1	NZ_AOEJ01000126.1	+	91844	91896	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1948-1	NZ_AOEI01000113.1	+	91787	91839	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-909-1	NZ_AOEU01000182.1	+	55101	55153	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Eco-936-1	NZ_AODZ01000257.1	+	44648	44700	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1964-1	NZ_AOES01000010.1	-	4113	4061	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-671-1	NZ_CP010304.1	+	4948099	4948151	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-290-1	NZ_CP005930.1	+	2266617	2266669	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1158-1	NZ_JH701513.1	+	91691	91743	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1979-1	NC_022370.1	+	4435942	4435994	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-621-1	NZ_CP008957.1	+	5016072	5016124	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-899-1	NZ_KI534620.1	+	8157	8209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-52-1	NZ_KQ235739.1	+	77226	77278	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-393-1	NZ_KK583188.1	-	330264	330212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1184-1	NZ_HE572566.1	-	2016950	2016898	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-632-1	NZ_CAO701000021.1	+	91956	92008	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-834-1	NZ_AVRR01000119.1	+	44656	44708	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-429-1	NZ_AWPM01000182.1	+	12739	12791	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-450-1	NZ_AWPT01000222.1	+	13300	13352	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-612-1	NZ_JHKF01000045.1	+	91627	91679	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-664-1	NZ_JHHZ01000024.1	-	911	859	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-571-1	NZ_JHMD01000021.1	+	91540	91592	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1165-1	NZ_AMTP01000117.1	+	92274	92326	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1066-1	NZ_AIFE01000058.1	+	96821	96873	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1068-1	NZ_AIFG01000065.1	+	94325	94377	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1073-1	NZ_AIFL01000073.1	+	95249	95301	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-925-1	NZ_ANMC01000254.1	+	4802	4854	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-942-1	NZ_AOEE01000236.1	+	7965	8017	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-784	NLF014_scaffold17740_1	+	423	475	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-785	2222084013.827_7	-	639	587	RNA → ←-hypo
Esp-79-1	NZ_AEME01000001.1	+	879790	879842	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-77-1	NZ_AEJW01000018.1	+	15607	15659	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-53-1	NZ_AEJZ01000171.1	-	17689	17637	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-78-1	NZ_AEJV01000033.1	+	22157	22209	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-15-1	NZ_JHDF01000032.1	-	51954	51902	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1425-1	NZ_KB732249.1	+	3306906	3306958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1410-1	NZ_KE701379.1	-	4263807	4263755	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1475-1	NZ_KE137293.1	-	53399	53347	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1571-1	NZ_KB976077.1	-	52047	51995	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1639-1	NZ_KE137149.1	-	39308	39256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1429-1	NZ_KE136626.1	-	1021432	1021380	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1570-1	NZ_KE136726.1	-	1008527	1008475	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1592-1	NZ_KE138680.1	+	1352301	1352353	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ema-1-1	NZ_KN714332.1	-	33004	32952	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cro-2-1	NZ_BBNA01000079.1	+	8219	8271	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cro-1-1	NZ_JXUN01000174.1	+	2944	2996	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cro-3-1	NC_013716.1	-	4016831	4016779	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eal-2-1	NZ_BBM01000009.1	-	42980	42928	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eal-4-1	NZ_AEJU01000166.1	+	12329	12381	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eal-5-1	NZ_AEJY01000264.1	-	1037	985	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eal-1-1	NZ_CP007025.1	-	2095964	2095912	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eal-3-1	NZ_CH991859.1	+	1832703	1832755	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-5	NZ_CWUD01000027.1	+	39075	39127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-835-1	NZ_AFAE02000014.1	-	44473	44421	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ban-1-1	NZ_ABOT01000022.1	-	97	45	RNA → hypo →
Eco-1442-1	NZ_KE137230.1	+	202992	203044	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1586-1	NZ_KB732639.1	+	82570	82622	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cyo-1-1	NZ_GG730300.1	+	190031	190083	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-763-1	NZ_AEZI02000021.1	+	1102773	1102825	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Efe-1-1	NZ_JZWP01000017.1	-	45156	45104	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Efe-1-2	NZ_JZWQ01000024.1	+	86602	86654	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Efe-1-3	NZ_JZWN01000028.1	+	83564	83616	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-54-1	NZ_AEJX01000050.1	+	12223	12275	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-84-1	NZ_JNPK01000044.1	+	90831	90883	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1655-1	NZ_GL872050.1	+	91674	91726	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Efe-3-1	NZ_GL870859.1	-	45478	45426	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1989-1	NZ_AEXD01000024.1	+	95154	95206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Efe-2-1	NC_011740.1	-	3932957	3932905	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Efe-4-1	NZ_CM001142.1	-	3881886	3881834	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sdy-5-1	NZ_LAIG01000046.1	-	686	634	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sdy-6-1	NZ_AERM01000110.1	+	14260	14312	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-786	scaffold88732.1.MH0014	+	177	229	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-787	scaffold94036.1.MH0025	-	440	388	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-788	C1998588.1.MH0079	-	203	151	RNA → ←-hypo
env-789	scaffold1530.9.O2.UC-18	+	19529	19581	RNA → ←-hypo
env-790	scaffold8769.24.O2.UC-23	+	453	505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-791	scaffold39006.2.V1.UC-17	+	567	619	RNA → ←-hypo
env-792	4491404.3.NODE_67640	-	319	267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-793	4491406.3.NODE_5404	+	85961	86013	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-794	4491409.3.NODE_11159	-	722	670	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-795	4491410.3.NODE_23735	+	163	215	RNA → ←-hypo
env-796	4491411.3.NODE_14623	+	66007	66059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-797	4491420.3.NODE_260	+	83392	83444	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-798	4491479.3.NODE_3717	+	11526	11578	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-799	4491482.3.NODE_114102	+	1175	1227	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-800	4491484.3.NODE_12754	+	80216	80268	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-801	MC6.MG3.AS1.C42510	+	670	722	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-802	SRS018313.C7874553	-	263	211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-803	SRS057478.LANL.scaffold.18323	+	764	816	RNA → ←-hypo
env-804	DLF002.scaffold11095.3	-	441	389	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-805	DLF006.scaffold8915.21	-	999	947	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-806	DLF008.scaffold4013.1	-	452	400	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-807	DLF009.scaffold6274.1	+	32314	32366	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-808	DLF012.C220366.1	+	276	328	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-809	DLF013.scaffold50084.2	+	132	184	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-810	DLM005.scaffold10654.5	+	248	300	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-811	DLM011.C451971.1	+	271	323	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-812	DLM012.scaffold26432.1	+	784	836	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-813	DLM022.scaffold90450.1	-	6267	6215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-814	DLM023.scaffold8878.5	-	933	881	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-815	DLM024.C119635.1	-	578	526	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-816	DLM028.scaffold4352.1	-	39427	39375	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-817	DOF004.scaffold50245.1	-	473	421	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-818	DOF006.C278658.1	+	276	328	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-819	DOF007.C334852.1	-	319	267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-820	DOF010.scaffold4818.8	+	1645	1697	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-821	DOF012.scaffold101.4	-	364	312	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-822	DOM003.scaffold11449.1	-	39427	39375	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-823	DOM008_scaffold1034.13	+	1472	1524	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-824	DOM016_scaffold5749.2	+	1289	1341	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-825	NLF008_scaffold4821.2	-	516	464	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-826	NLM002_C331626.1	+	159	211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-827	NLM003_scaffold29307.1	-	621	569	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-828	NLM006_scaffold26360.2	+	30174	30226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-829	NLM015_scaffold10348.11	+	1248	1300	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-830	NLM016_scaffold4185.1	+	346	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-831	NLM017_scaffold15483.4	+	491	543	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-832	NLM022_C583280.1	+	276	328	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-833	NLM024_C270022.1	+	816	868	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-834	NLM028_scaffold24732.2	+	337	389	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-835	NOF002_scaffold5884.5	+	505	557	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-836	NOF006_scaffold6742.1	-	452	400	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-837	NOF010_scaffold32693.2	+	187	239	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-838	NOM008_scaffold26361.2	+	421	473	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-839	NOM018_scaffold38037.2	+	115	167	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-840	NOM020_scaffold104.1	-	1043	991	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-841	NOM025_scaffold24626.1	-	474	422	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-842	NOM028_scaffold47489.1	+	23473	23525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-843	NOM029_scaffold36166.1	-	466	414	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-844	longitudinal.69.558	-	44412	44360	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-845	longitudinal.70.173	+	546960	546908	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-846	longitudinal.71.356	+	21299	21351	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-847	longitudinal.72.263	-	44442	44390	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-848	longitudinal.115.82	+	20819	20871	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-849	longitudinal.116.26	+	20918	20970	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-850	longitudinal.117.29	-	44410	44358	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-851	longitudinal.303.178	-	44417	44365	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-852	longitudinal.304.63	-	44415	44363	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-853	longitudinal.348.423	+	1372	1424	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-854	longitudinal.349.45	+	32353	32405	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-855	PaFGMunAill_c006456	-	489	437	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-856	3300001567_10000498	-	39514	39462	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-857	SRS017191_C1719102	-	442	390	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-858	SRS017521_Baylor_scaffold.53627	+	39694	39746	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-859	SRS019601_C1965939	+	486	538	RNA → ← hypo
env-860	FGTW_contig17927	+	168	220	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1931-1	NZ_AQBH01000074.1	+	34085	34137	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1010-1	NZ_APXM01000157.1	+	11559	11611	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1935-1	NZ_AQBL01000072.1	+	32496	32548	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1012-1	NZ_APXN01000126.1	+	30077	30129	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1937-1	NZ_AQBM01000080.1	+	34161	34213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1007-1	NZ_AQFJ01000025.1	+	86615	86667	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1941-1	NZ_AQBQ01000078.1	+	34132	34184	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1006-1	NZ_APZM01000121.1	+	29881	29933	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1942-1	NZ_AQBR01000109.1	+	34119	34171	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1086-1	NZ_AIGA01000058.1	+	91006	91058	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2167-1	NZ_AQBU01000262.1	+	18685	18737	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1091-1	NZ_AIGF01000049.1	+	93764	93816	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2174-1	NZ_AQBZ01000220.1	+	18684	18736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-831-1	NZ_AQDC01000103.1	+	87700	87752	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1060-1	NZ_AIEY01000064.1	+	90155	90207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1084-1	NZ_AIFW01000046.1	+	91475	91527	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1049-1	NZ_AIHL01000077.1	+	101568	101620	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1943-1	NZ_AQBS01000074.1	+	34100	34152	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1926-1	NZ_AQBD01000151.1	+	87569	87621	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1932-1	NZ_AQBI01000070.1	+	34119	34171	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1005-1	NZ_AQDA01000087.1	+	18694	18746	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1938-1	NZ_AQBN01000075.1	+	34114	34166	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1087-1	NZ_AIGB01000037.1	+	93728	93780	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2168-1	NZ_AQBV01000151.1	+	18698	18750	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1063-1	NZ_AIFB01000068.1	+	89616	89668	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2178-1	NZ_AQCD01000147.1	+	18690	18742	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1064-1	NZ_AIFC01000041.1	+	89813	89865	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2177-1	NZ_AQCC01000175.1	+	18742	18794	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1071-1	NZ_AIFJ01000088.1	+	96866	96918	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1050-1	NZ_AIHM01000068.1	+	30233	30285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1927-1	NZ_AQBE01000065.1	+	87685	87737	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-833-1	NZ_APXK01000246.1	+	48768	48820	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1933-1	NZ_AQBJ01000075.1	+	34205	34257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1089-1	NZ_AIGD01000026.1	+	90023	90075	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1939-1	NZ_AQBO01000076.1	+	32750	32802	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1057-1	NZ_AIEV01000058.1	+	88320	88372	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1058-1	NZ_AIEW01000062.1	+	89743	89795	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2171-1	NZ_AQBW01000092.1	+	18599	18651	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1065-1	NZ_AIFD01000051.1	+	91758	91810	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-418-1	NZ_JAQA01000142.1	-	430	378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-7-1	NZ_AMKL01000066.1	+	88372	88424	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-3-1	NZ_AMKH01000064.1	+	1250	1302	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sdy-7-1	NZ_AMJS01000102.1	+	139660	139712	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-4-1	NZ_AMKI01000053.1	+	675911	675963	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-17-1	NZ_AMJX01000076.1	+	186189	186241	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-5-1	NZ_AMKJ01000065.1	+	11296	11348	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-6-1	NZ_AMKA01000088.1	+	82733	82785	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-11-1	NZ_AMKG01000054.1	+	186704	186756	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-5-1	NZ_AMJZ01000079.1	+	82295	82347	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-6-1	NZ_AMKK01000080.1	+	88121	88173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-10-1	NZ_AMKE01000113.1	+	199814	199866	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-9-1	NZ_AMKD01000099.1	+	44335	44387	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-73-1	NZ_AMKF01000096.1	+	14330	14382	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-11-1	NZ_AMJR01000162.1	+	48321	48373	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-7-1	NZ_AMKB01000096.1	+	114428	114480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-77-1	NZ_AMJT01000150.1	+	49168	49220	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-78-1	NZ_AMJV01000159.1	+	49169	49221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-80-1	NZ_AMJY01000153.1	+	131442	131494	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-75-1	NZ_AMJP01000130.1	+	49169	49221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-8-1	NZ_AMKC01000199.1	+	34062	34114	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-79-1	NZ_AMJW01000030.1	+	35330	35382	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-16-1	NZ_AMJU01000250.1	+	48467	48519	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sdy-1-1	NZ_AMJQ01000036.1	-	5806	5754	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-76-1	NZ_ANAN01000865.1	+	33995	34047	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-994-1	NZ_AAJT02000014.1	+	76738	76790	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1152-1	NZ_AAJU02000017.1	+	31540	31592	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1107-1	NZ_AAJV02000012.1	-	49537	49485	RNA → ←-hypō
Eco-1103-1	NZ_AAJW02000005.1	+	149007	149059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-767-1	NZ_AAMK02000013.1	-	39845	39793	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-837-1	NZ_AFAC02000012.1	-	1611362	1611310	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-849-1	NZ_AAKB02000001.1	-	1814208	1814156	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-975-1	NZ_AAJX02000008.1	-	1237	1185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1768-1	NZ_AKAX01000157.1	-	651	599	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-468-1	NZ_JHLL01000039.1	-	605	553	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-40-1	NZ_JOSK01000099.1	+	84179	84231	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-956-1	NZ_AZBZ01000002.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2172-1	NZ_AQBX01000136.1	+	18739	18791	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2179-1	NZ_AQCE01000128.1	+	18671	18723	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1082-1	NZ_AIFU01000024.1	+	31669	31721	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1924-1	NZ_AQBB01000153.1	+	87690	87742	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1037-1	NZ_AIGZ01000027.1	+	125333	125385	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-873-1	NZ_AFAI02000031.1	+	737717	737769	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1973-1	NZ_AOEN01000114.1	+	91791	91843	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2169-1	NZ_APZI01000449.1	+	13475	13527	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2170-1	NZ_APZZ01000144.1	+	18534	18586	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1014-1	NZ_AQCY01000139.1	+	23759	23811	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1928-1	NZ_AQBF01000062.1	+	87675	87727	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1934-1	NZ_AQBK01000072.1	+	34111	34163	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1940-1	NZ_AQBP01000082.1	+	34095	34147	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1008-1	NZ_APXL01000532.1	+	7809	7861	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-365-1	NZ_JXBV01000104.1	+	79967	80019	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-74-1	NZ_AMWM01000231.1	+	43473	43525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-282-1	NZ_AEZO02000004.1	-	469851	469799	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2166-1	NZ_AQBT01000172.1	+	18701	18753	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1085-1	NZ_AIFZ01000036.1	+	91384	91436	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2173-1	NZ_AQBY01000146.1	+	18635	18687	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1090-1	NZ_AIGE01000037.1	+	90172	90224	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1925-1	NZ_AQBC01000182.1	+	87680	87732	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2175-1	NZ_AQCA01000232.1	+	18733	18785	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-13-1	NZ_AGRD01000092.1	+	94585	94637	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1185-1	NZ_APNX01000009.1	-	52622	52570	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1182-1	NZ_APNU01000021.1	-	52129	52077	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1186-1	NZ_APNV01000024.1	+	64755	64807	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2013-1	NZ_AOQY01000020.1	-	57102	57050	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2006-1	NZ_AOQQ01000030.1	+	32479	32531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2005-1	NZ_AORB01000013.1	+	32411	32463	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2010-1	NZ_AORA01000044.1	-	52396	52344	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2015-1	NZ_AOQC01000042.1	-	52225	52173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2018-1	NZ_AOQM01000007.1	-	52226	52174	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2019-1	NZ_AOQN01000054.1	-	52224	52172	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2011-1	NZ_AOQW01000017.1	-	28856	28804	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2012-1	NZ_AOQX01000001.1	-	28848	28796	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2017-1	NZ_AOQE01000030.1	-	21619	21567	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2020-1	NZ_AOQO01000021.1	+	8155	8207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2005-2	NZ_AOQP01000122.1	+	48352	48404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2009-1	NZ_AOQU01000249.1	-	443	391	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2014-1	NZ_AOQZ01000031.1	-	28877	28825	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2007-1	NZ_AOQR01000094.1	+	18381	18433	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-2008-1	NZ_AOQS01000188.1	+	18322	18374	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1770-1	NZ_AJVT01000257.1	+	35439	35491	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1776-1	NZ_AKAW01000246.1	-	430	378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-461-1	NZ_JDRV01000378.1	-	506	454	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-920-1	NZ_AEZQ02000013.1	+	1490930	1490982	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-923-1	NZ_AEZW02000001.1	+	2765917	2765969	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-845-1	NZ_AEZW02000026.1	+	2868888	2868940	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-928-1	NZ_AEZO02000030.1	-	10772	10720	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1702-1	NZ_ADWR01000068.1	+	21376	21428	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-762-1	NZ_AEZO02000020.1	+	311836	311888	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-843-1	NZ_AEZO02000105.1	-	167468	167416	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-844-1	NZ_AFAA02000008.1	-	253538	253486	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-934-1	NZ_AEZR02000014.1	-	89280	89228	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1684-1	NZ_ADWT01000012.1	+	89502	89554	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-927-1	NZ_AEZO02000011.1	-	47842	47790	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2016-1	NZ_AOQD01000036.1	-	57103	57051	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-728-1	NZ_AOUQ01000152.1	+	41502	41554	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-381-1	NZ_AIBZ01000106.1	-	52248	52196	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-291-2	NZ_ASHD01000050.1	+	80292	80344	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-287-1	NZ_ATOA01000041.1	+	64688	64740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-281-1	NZ_AEZY02000004.1	+	82291	82343	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-392-1	NZ_JRYM01000024.1	+	86369	86421	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1831-1	NZ_AICG01000014.1	+	88929	88981	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-344-1	NZ_AIAP01000056.1	-	52126	52074	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-341-1	NZ_AIAL01000036.1	-	39155	39103	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-361-1	NZ_AIBF01000024.1	+	80060	80112	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-6	NZ_CXEQ01000019.1	-	645	593	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-7	NZ_CXOD01000022.1	+	39082	39134	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-369-1	NZ_AIBN01000020.1	-	505	453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-357-1	NZ_AIBC01000257.1	-	613	561	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-371-1	NZ_AIBP01000011.1	-	18225	18173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-377-1	NZ_AIBU01000027.1	-	690	638	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-383-1	NZ_AICB01000019.1	+	11304	11356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-386-1	NZ_AICE01000057.1	+	80383	80435	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-333-1	NZ_AIAE01000024.1	+	91910	91962	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-354-1	NZ_AIAZ01000228.1	-	505	453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-342-1	NZ_AIAN01000137.1	+	23487	23539	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-382-1	NZ_AICA01000012.1	-	487	435	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-347-1	NZ_AIAS01000067.1	+	39822	39874	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-370-1	NZ_AIBO01000227.1	-	39194	39142	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-376-1	NZ_AIBV01000160.1	-	486	434	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-543-1	NZ_ASZR01000033.1	+	85134	85186	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-355-1	NZ_AIBA01000470.1	+	46666	46718	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-340-1	NZ_AIAM01000047.1	-	52250	52198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-544-1	NZ_ASZO01000023.1	-	18236	18184	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-332-1	NZ_AIAD01000260.1	-	547	495	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-363-1	NZ_AIBI01000108.1	+	84228	84280	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-373-1	NZ_AIBS01000001.1	+	76094	76146	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-334-1	NZ_AIAF01000014.1	-	486	434	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-385-1	NZ_AICD01000096.1	-	52255	52203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-360-1	NZ_AIBG01000067.1	-	52126	52074	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-289-1	NZ_CWHW01000022.1	-	39312	39260	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-45-1	NZ_JHRA01000033.1	-	526	474	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-195-1	NZ_JHRC01000049.1	+	8435	8487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-44-1	NZ_JHQZ01000062.1	-	5988	5936	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-196-1	NZ_JHRG01000048.1	+	11856	11908	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-211-1	NZ_JHRM01000023.1	-	39670	39618	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-212-1	NZ_JHRQ01000039.1	+	23521	23573	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-43-1	NZ_JHRT01000008.1	-	39527	39475	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-8	NZ_CXLF01000021.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-9	NZ_CXDE01000021.1	+	39007	39059	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-10	NZ_CXMH01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-11	NZ_CXLA01000024.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-12	NZ_CXDX01000024.1	+	39030	39082	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-13	NZ_CXKH01000025.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-14	NZ_CWYN01000026.1	-	660	608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-15	NZ_CXBZ01000018.1	-	636	584	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-16	NZ_CXDU01000021.1	+	47902	47954	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-17	NZ_CXGT01000025.1	-	1211	1159	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-18	NZ_CXAN01000023.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-19	NZ_CXJC01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-20	NZ_CXAI01000025.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-21	NZ_CXGW01000022.1	-	3806	3754	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-22	NZ_CXIW01000023.1	+	39104	39156	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-23	NZ_CWYW01000026.1	+	39257	39309	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-24	NZ_CXCZ01000017.1	-	630	578	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-25	NZ_CXLY01000025.1	-	1734	1682	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-26	NZ_CXBY01000020.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-27	NZ_CXMR01000026.1	-	1627	1575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-28	NZ_CXID01000025.1	-	793	741	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-29	NZ_CXJG01000027.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-30	NZ_CXJN01000027.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-31	NZ_CXFQ01000025.1	-	664	612	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-32	NZ_CXOC01000023.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-33	NZ_CWZL01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-34	NZ_CWWR01000026.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-35	NZ_CXDO01000020.1	+	39023	39075	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-36	NZ_CXLN01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-37	NZ_CXMW01000027.1	-	683	631	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-38	NZ_CXEG01000022.1	+	39030	39082	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-39	NZ_CXBG01000024.1	+	39023	39075	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-40	NZ_CXKW01000025.1	-	1627	1575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-25-1	NZ_LAIB01000061.1	-	31124	31072	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-25-2	NZ_LAIF01000103.1	-	31124	31072	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-25-3	NZ_LAHW01000133.1	-	31124	31072	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-460-1	NZ_LBLW01000064.1	+	82857	82909	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-25-9	NZ_LAHX01000020.1	-	31124	31072	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-41	NZ_CXEY01000021.1	-	1726	1674	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-42	NZ_CXCW01000015.1	-	378	326	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-25-4	NZ_LAIA01000057.1	+	24623	24675	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-43	NZ_CXDA01000016.1	-	428	376	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo →
Sso-1-44	NZ_CWZJ01000023.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-45	NZ_CWSX01000023.1	+	38756	38808	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-46	NZ_CWUJ01000026.1	-	660	608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sfl-25-5	NZ.LAHY01000049.1	+	24753	24805	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-47	NZ.CWTE01000026.1	-	529	477	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-48	NZ.CWVE01000028.1	-	800	748	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-49	NZ.CWUI01000024.1	+	38914	38966	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-50	NZ.CWUS01000027.1	-	1730	1678	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-51	NZ.CXNJ01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-52	NZ.CWUR01000020.1	-	495	443	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-53	NZ.CWZX01000025.1	-	1539	1487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-54	NZ.CWVJ01000024.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-55	NZ.CXFL01000025.1	-	481	429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-56	NZ.CWSU01000026.1	-	529	477	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-57	NZ.CXIK01000024.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-58	NZ.CWVL01000028.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-59	NZ.CWYU01000024.1	+	39039	39091	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-60	NZ.CWVI01000027.1	+	39099	39151	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-61	NZ.CXHA01000022.1	+	39104	39156	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-62	NZ.CWTL01000023.1	-	1776	1724	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-63	NZ.CXER01000023.1	+	39030	39082	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-64	NZ.CWTV01000027.1	+	39076	39128	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-65	NZ.CXNI01000023.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-66	NZ.CWWF01000027.1	+	39093	39145	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-67	NZ.CXJV01000026.1	-	695	643	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-68	NZ.CWTG01000022.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-69	NZ.CWZQ01000026.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-70	NZ.CWXI01000025.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-71	NZ.CWWE01000028.1	-	662	610	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-72	NZ.CXIA01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-73	NZ.CXHM01000025.1	-	782	730	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-74	NZ.CWVP01000027.1	-	1234	1182	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-75	NZ.CXGI01000026.1	-	668	616	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-76	NZ.CWUZ01000025.1	-	1627	1575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-77	NZ.CXAE01000028.1	-	529	477	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-78	NZ.CXMN01000028.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-79	NZ.CXKR01000024.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-80	NZ.CXIV01000028.1	-	1627	1575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-81	NZ.CXLI01000025.1	-	1539	1487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-82	NZ.CWVQ01000028.1	-	1224	1172	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-83	NZ.CXCX01000002.1	+	80210	80262	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-84	NZ.CWTU01000026.1	+	39106	39158	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-85	NZ.CXGM01000023.1	-	867	815	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-86	NZ.CXHR01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-87	NZ.CWTX01000029.1	-	660	608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-88	NZ.CXIN01000026.1	-	786	734	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-89	NZ.CXDH01000024.1	-	632	580	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-90	NZ.CWTW01000025.1	-	556	504	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-91	NZ.CXAH01000027.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-92	NZ.CWXW01000022.1	+	39104	39156	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-93	NZ.CXMO01000027.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-94	NZ.CWUA01000024.1	-	1539	1487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-95	NZ.CXAY01000023.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-96	NZ.CWYH01000026.1	-	664	612	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-97	NZ.CXNC01000028.1	-	800	748	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sso-1-98	NZ.CWTT01000028.1	+	38880	38932	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-99	NZ.CXBA01000025.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-100	NZ.CXHG01000028.1	-	695	643	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-101	NZ.CXIH01000027.1	-	768	716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-102	NZ.CWST01000068.1	-	660	608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-103	NZ.CXGQ01000025.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-104	NZ.CWYP01000024.1	-	1696	1644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-105	NZ.CWVT01000028.1	-	660	608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-106	NZ.CXNR01000022.1	-	630	578	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-107	NZ.CXHY01000027.1	-	1627	1575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-108	NZ.CXHB01000028.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-109	NZ.CWUO01000021.1	-	660	608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-110	NZ.CXCC01000002.1	+	80327	80379	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-111	NZ.CW XK01000292.1	+	787	839	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-112	NZ.CWTH01000026.1	+	39059	39111	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-113	NZ.CXHL01000028.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-114	NZ.CXAQ01000027.1	-	6653	6601	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-115	NZ.CWTZ01000023.1	+	39040	39092	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-116	NZ.CWZU01000029.1	-	664	612	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-117	NZ.CWZH01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-118	NZ.CWUU01000028.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-119	NZ.CWXP01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-120	NZ.CXFX01000021.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-121	NZ.CWVB01000027.1	+	39093	39145	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-122	NZ.CXBJ01000069.1	+	20736	20788	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-123	NZ.CXFR01000024.1	-	481	429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-124	NZ.CWVM01000027.1	+	39093	39145	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-125	NZ.CXDC01000015.1	+	47850	47902	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-126	NZ.CXLJ01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-127	NZ.CWUE01000025.1	-	1535	1483	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-128	NZ.CXIU01000022.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-129	NZ.CXFT01000022.1	-	481	429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-130	NZ.CWTO01000027.1	-	660	608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-131	NZ.CXKJ01000023.1	-	1627	1575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-132	NZ.CWXM01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-133	NZ.CWBC01000028.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-134	NZ.CW XV01000020.1	-	854	802	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-135	NZ.CXGY01000028.1	-	529	477	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-136	NZ.CWVU01000028.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-137	NZ.CXMZ01000018.1	-	6792	6740	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-138	NZ.CXKS01000028.1	-	800	748	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-139	NZ.CWUX01000023.1	-	2669	2617	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-140	NZ.CWXS01000023.1	+	39104	39156	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-141	NZ.CXLD01000025.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-142	NZ.CWVF01000027.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-143	NZ.CXJB01000028.1	-	790	738	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-144	NZ.CXBF01000020.1	+	39023	39075	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-145	NZ.CWTF01000026.1	-	660	608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-146	NZ.CXMS01000026.1	-	795	743	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-147	NZ.CWWT01000020.1	-	843	791	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-148	NZ.CWVK01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-149	NZ.CWUN01000018.1	-	495	443	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sso-1-150	NZ_CXLM01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-151	NZ_CWVO01000028.1	+	39093	39145	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-152	NZ_CXEW01000014.1	+	39108	39160	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-153	NZ_CWVA01000027.1	-	684	632	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-154	NZ_CWUB01000022.1	-	555	503	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-155	NZ_CXIL01000022.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-156	NZ_CWUF01000024.1	+	39068	39120	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-157	NZ_CXJW01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-158	NZ_CWVZ01000025.1	-	1223	1171	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-159	NZ_CXEJ01000023.1	-	644	592	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-160	NZ_CXMU01000027.1	+	39094	39146	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-161	NZ_CXVH01000025.1	+	39093	39145	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-162	NZ_CXLC01000025.1	+	39094	39146	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-163	NZ_CXJE01000028.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-164	NZ_CWTR01000029.1	-	495	443	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-165	NZ_CXDR01000004.1	-	630	578	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-166	NZ_CXNM01000026.1	-	1539	1487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-167	NZ_CXMX01000027.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-168	NZ_CWZD01000024.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-169	NZ_CXEF01000015.1	+	39030	39082	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-170	NZ_CXBM01000061.1	-	2767	2715	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-171	NZ_CXLL01000024.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-172	NZ_CXMF01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-173	NZ_CXFP01000025.1	-	644	592	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-174	NZ_CXKA01000026.1	-	662	610	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-175	NZ_CXEZ01000023.1	+	39123	39175	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-176	NZ_CXEM01000023.1	+	39031	39083	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-177	NZ_CXLS01000028.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-178	NZ_CXDT01000023.1	-	630	578	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-179	NZ_CXEE01000022.1	-	650	598	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-180	NZ_CWZR01000026.1	+	39041	39093	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-181	NZ_CXKY01000024.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-182	NZ_CXFI01000026.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-183	NZ_CXKO01000028.1	-	776	724	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-184	NZ_CXMV01000027.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-185	NZ_CXLO01000028.1	-	695	643	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-186	NZ_CXJM01000025.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-187	NZ_CXNG01000028.1	-	529	477	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-188	NZ_CXGZ01000014.1	-	627	575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-189	NZ_CWWZ01000021.1	-	846	794	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-190	NZ_CXNB01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-191	NZ_CXGO01000022.1	-	850	798	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-192	NZ_CWXT01000023.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-193	NZ_CXLZ01000024.1	-	1703	1651	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-194	NZ_CWZV01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-195	NZ_CXDY01000020.1	-	644	592	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-196	NZ_CXCQ01000030.1	-	405	353	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-197	NZ_CXAM01000038.1	-	630	578	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-198	NZ_CXCU01000026.1	-	636	584	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-353-1	NZ_AIAY01000004.1	+	76542	76594	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-343-1	NZ_AIAO01000005.1	-	39155	39103	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-348-1	NZ_AIAT01000054.1	+	18409	18461	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Eco-345-1	NZ_AIAQ01000283.1	+	29275	29327	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-384-1	NZ_AICC01000004.1	+	46666	46718	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-356-1	NZ_AIBB01000072.1	-	39155	39103	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-349-1	NZ_AIAU01000029.1	-	486	434	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-378-1	NZ_AIBX01000062.1	+	47741	47793	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-339-1	NZ_AIAJ01000152.1	-	640	588	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-336-1	NZ_AIAH01000234.1	-	547	495	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-337-1	NZ_AIAI01000001.1	-	41795	41743	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-358-1	NZ_AIBD01000070.1	+	46666	46718	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-379-1	NZ_AIBW01000118.1	-	640	588	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-50-1	NZ_ATOE01000063.1	+	39109	39161	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-366-1	NZ_AIBK01000054.1	+	28476	28528	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-338-1	NZ_AICF01000195.1	-	486	434	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-372-1	NZ_AIBR01000067.1	+	47726	47778	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-359-1	NZ_AIBE01000033.1	-	52126	52074	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-350-1	NZ_AIAV01000087.1	+	60721	60773	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-375-1	NZ_AIBQ01000159.1	+	11322	11374	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-199	NZ_CXAJ01000024.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-200	NZ_CWXR01000025.1	-	848	796	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-201	NZ_CXML01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-202	NZ_CWXU01000023.1	-	855	803	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-203	NZ_CXBD01000022.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-25-6	NZ_LAHZ01000037.1	+	24424	24476	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-204	NZ_CXJT01000025.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-205	NZ_CWXZ01000023.1	-	865	813	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-206	NZ_CXIX01000027.1	-	786	734	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-207	NZ_CWXD01000025.1	+	39104	39156	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-25-10	NZ_LAID01000111.1	-	31124	31072	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-208	NZ_CXFH01000026.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-51-1	NZ_LAIC01000109.1	+	24423	24475	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-209	NZ_CXHU01000023.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-210	NZ_CXEH01000026.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-25-7	NZ_LAIE01000028.1	+	30022	30074	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-211	NZ_CXKP01000022.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-212	NZ_CWWJ01000027.1	+	39093	39145	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-213	NZ_CXBI01000018.1	+	39023	39075	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-214	NZ_CXIY01000027.1	-	793	741	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-215	NZ_CXHS01000025.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-216	NZ_CWUK01000025.1	-	555	503	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-217	NZ_CWYX01000027.1	+	39115	39167	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-218	NZ_CWWW01000023.1	+	39099	39151	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-219	NZ_CXJH01000024.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-220	NZ_CWUL01000025.1	+	38789	38841	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-221	NZ_CXIM01000022.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-25-8	NZ_LAHV01000005.1	+	24423	24475	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-222	NZ_CXGR01000027.1	-	695	643	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-223	NZ_CXLK01000027.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-224	NZ_CXCD01000021.1	+	39007	39059	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-225	NZ_CWZP01000023.1	-	664	612	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-226	NZ_CWZK01000029.1	+	39099	39151	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-227	NZ_CWYC01000025.1	+	39084	39136	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-228	NZ_CXCS01000004.1	+	76716	76768	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sso-1-229	NZ_CXFO01000025.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-230	NZ_CXJF01000027.1	-	1539	1487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-231	NZ_CXFF01000024.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-232	NZ_CWYB01000025.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-233	NZ_CWZY01000026.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-234	NZ_CXMG01000026.1	-	792	740	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-235	NZ_CXBS01000019.1	-	630	578	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-236	NZ_CXBX01000019.1	+	39027	39079	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-237	NZ_CXKF01000028.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-238	NZ_CWWP01000024.1	+	39099	39151	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-239	NZ_CXBW01000012.1	+	47420	47472	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-240	NZ_CXEI01000023.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-241	NZ_CXJZ01000027.1	-	695	643	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-242	NZ_CXKU01000020.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-243	NZ_CXLB01000016.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-244	NZ_CXJP01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-245	NZ_CXGK01000028.1	-	556	504	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-246	NZ_CXEO01000018.1	-	644	592	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-247	NZ_CWYG01000025.1	-	1680	1628	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-248	NZ_CXLG01000028.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-249	NZ_CWUU01000025.1	+	39104	39156	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-250	NZ_CWZO01000026.1	-	662	610	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-251	NZ_CXGC01000028.1	-	1627	1575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-252	NZ_CWUC01000026.1	-	660	608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-253	NZ_CXEB01000017.1	+	47821	47873	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-254	NZ_CXAG01000028.1	-	664	612	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-255	NZ_CWWG01000023.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-256	NZ_CXES01000023.1	+	39030	39082	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-257	NZ_CWYR01000024.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-258	NZ_CWVN01000027.1	-	799	747	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-259	NZ_CWWS01000022.1	-	833	781	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-260	NZ_CXFD01000026.1	-	652	600	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-261	NZ_CWYD01000027.1	+	39100	39152	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-262	NZ_CWUU01000028.1	-	1768	1716	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-263	NZ_CXCO01000033.1	-	632	580	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-264	NZ_CWZB01000027.1	-	672	620	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-265	NZ_CWVG01000028.1	-	1732	1680	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-266	NZ_CXJQ01000027.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-267	NZ_CXCR01000016.1	-	465	413	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-268	NZ_CWTP01000028.1	+	39087	39139	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-269	NZ_CXAR01000002.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-270	NZ_CXIG01000026.1	-	1539	1487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-271	NZ_CWTA01000027.1	+	39144	39196	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-272	NZ_CWXC01000024.1	+	39104	39156	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-273	NZ_CXBH01000062.1	+	20736	20788	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-274	NZ_CWTK01000015.1	-	660	608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-275	NZ_CXBC01000024.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-276	NZ_CXCI01000022.1	-	630	578	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-277	NZ_CWWD01000024.1	-	1202	1150	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-278	NZ_CXDJ01000008.1	-	630	578	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-279	NZ_CXFS01000026.1	+	39031	39083	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-280	NZ_CWTI01000027.1	+	39109	39161	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sso-1-281	NZ.CXDV01000023.1	+	47867	47919	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-282	NZ.CXAW01000024.1	-	1174	1122	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-283	NZ.CWTC01000022.1	+	39082	39134	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-284	NZ.CXLP01000026.1	-	794	742	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-285	NZ.CXIQ01000021.1	-	2679	2627	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-286	NZ.CWTY01000023.1	+	39069	39121	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-287	NZ.CXEX01000023.1	+	39045	39097	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-288	NZ.CXAV01000016.1	+	39007	39059	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-289	NZ.CWUT01000025.1	+	39093	39145	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-290	NZ.CXLQ01000026.1	-	1279	1227	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-291	NZ.CXND01000027.1	-	915	863	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-292	NZ.CWVH01000021.1	+	39093	39145	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-293	NZ.CWVX01000020.1	-	835	783	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-294	NZ.CXFK01000023.1	+	39045	39097	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-295	NZ.CWVD01000031.1	+	39089	39141	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-296	NZ.CWTN01000022.1	-	660	608	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-297	NZ.CXHIO1000028.1	-	792	740	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-298	NZ.CWTVQ01000027.1	+	38832	38884	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-299	NZ.CWVV01000028.1	+	39099	39151	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-300	NZ.CWZIO1000025.1	-	1692	1640	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-301	NZ.CWTB01000024.1	-	660	608	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-302	NZ.CXAB01000024.1	-	1174	1122	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-303	NZ.CWUM01000015.1	+	39156	39208	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-304	NZ.CWVX01000027.1	+	39093	39145	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-305	NZ.CXKV01000028.1	-	682	630	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-306	NZ.CWSW01000026.1	-	660	608	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-307	NZ.CWWM01000029.1	+	39082	39134	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-308	NZ.CXDI01000014.1	-	480	428	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-309	NZ.CWVC01000026.1	+	39093	39145	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-310	NZ.CWVJ01000023.1	-	1539	1487	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-311	NZ.CXBL01000018.1	+	39135	39187	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-312	NZ.CWVY01000029.1	+	39082	39134	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-313	NZ.CXEL01000014.1	-	644	592	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-314	NZ.CXHH01000027.1	-	695	643	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-315	NZ.CWVW01000029.1	-	1397	1345	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-316	NZ.CWZW01000026.1	-	559	507	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-317	NZ.CXHJ01000027.1	-	695	643	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-318	NZ.CWUH01000025.1	+	39104	39156	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-319	NZ.CXNS01000027.1	-	1294	1242	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-320	NZ.CXGV01000027.1	+	39094	39146	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-321	NZ.CXHO01000023.1	+	39089	39141	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-322	NZ.CWTM01000025.1	+	39158	39210	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-323	NZ.CXMK01000027.1	+	39089	39141	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-324	NZ.CXBU01000023.1	+	39030	39082	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-325	NZ.CWVR01000030.1	+	39093	39145	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-326	NZ.CXIF01000024.1	-	776	724	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-327	NZ.CXDZ01000014.1	-	1137	1085	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-328	NZ.CWWO01000025.1	+	39089	39141	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-329	NZ.CWYT01000026.1	-	664	612	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-330	NZ.CXHQ01000026.1	+	39082	39134	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-331	NZ.CWYY01000025.1	-	1539	1487	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-332	NZ.CXKM01000025.1	-	771	719	RNA→rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

Sso-1-333	NZ.CWZF01000025.1	-	662	610	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-334	NZ.CWWA01000027.1	-	800	748	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-335	NZ.CXHE01000025.1	-	2674	2622	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-336	NZ.CXBN01000024.1	+	39023	39075	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-337	NZ.CXEN01000022.1	-	821	769	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-338	NZ.CXAT01000016.1	+	39023	39075	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-339	NZ.CXJA01000025.1	+	39089	39141	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-340	NZ.CWUP01000024.1	-	555	503	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-341	NZ.CXBO01000021.1	-	1174	1122	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-342	NZ.CXCY01000005.1	+	80319	80371	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-343	NZ.CWUG01000016.1	+	38772	38824	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-344	NZ.CXHW01000028.1	+	39089	39141	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-345	NZ.CXIR01000026.1	+	39082	39134	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-346	NZ.CWVB01000026.1	-	794	742	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-347	NZ.CXLR01000027.1	+	39089	39141	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-348	NZ.CXCL01000027.1	-	632	580	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-349	NZ.CWSY01000022.1	-	555	503	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-350	NZ.CXDN01000021.1	-	1174	1122	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-351	NZ.CWXB01000016.1	+	39104	39156	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-352	NZ.CWXA01000021.1	+	39104	39156	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-353	NZ.CWSZ01000022.1	-	660	608	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-354	NZ.CXAL01000025.1	-	676	624	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-355	NZ.CXLT01000025.1	+	39089	39141	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-356	NZ.CWVK01000028.1	-	800	748	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-357	NZ.CXDS01000022.1	-	5350	5298	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-358	NZ.CWUV01000023.1	+	39082	39134	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-359	NZ.CXGN01000021.1	-	628	576	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-360	NZ.CWYK01000022.1	+	39082	39134	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-361	NZ.CWUQ01000021.1	-	660	608	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-362	NZ.CXKG01000049.1	+	22507	22559	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-363	NZ.CXFC01000024.1	-	1701	1649	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-364	NZ.CWWL01000026.1	-	1227	1175	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-365	NZ.CXGH01000025.1	+	39045	39097	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-366	NZ.CXEU01000023.1	-	768	716	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-367	NZ.CWVS01000024.1	-	3757	3705	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-368	NZ.CXHD01000027.1	+	39082	39134	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-369	NZ.CXJR01000027.1	+	39089	39141	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-370	NZ.CWWI01000027.1	-	1221	1169	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-371	NZ.CXIS01000027.1	-	669	617	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-372	NZ.CXFW01000022.1	-	1174	1122	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-373	NZ.CXIC01000002.1	+	80379	80431	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-374	NZ.CWWQ01000023.1	+	39082	39134	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-375	NZ.CXMJ01000027.1	-	798	746	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-376	NZ.CXDP01000021.1	-	433	381	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→ hypo→
Sso-1-377	NZ.CXLE01000027.1	+	39089	39141	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-378	NZ.CWZG01000025.1	+	39089	39141	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-379	NZ.CXHC01000027.1	-	695	643	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-380	NZ.CWYM01000024.1	+	39089	39141	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-381	NZ.CXDB01000009.1	+	33320	33372	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-382	NZ.CXMM01000026.1	+	39089	39141	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-383	NZ.CWYI01000029.1	-	664	612	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sso-1-384	NZ.CWXN01000026.1	+	39106	39158	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

Sso-1-385	NZ_CXNN01000025.1	-	1539	1487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-386	NZ_CXBT01000023.1	+	39007	39059	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-387	NZ_CXFA01000020.1	+	47728	47780	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-388	NZ_CXGF01000027.1	-	556	504	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-389	NZ_CXGD01000020.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-390	NZ_CXDGE01000045.1	-	488	436	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-391	NZ_CXGE01000027.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-392	NZ_CWXQ01000020.1	-	846	794	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-393	NZ_CXFB01000026.1	-	695	643	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-394	NZ_CXDK01000016.1	+	47867	47919	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-395	NZ_CXKI01000002.1	+	67788	67840	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-396	NZ_CXCT01000016.1	-	479	427	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-397	NZ_CXCN01000005.1	+	70940	70992	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-398	NZ_CXCA01000025.1	-	632	580	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-399	NZ_CXCE01000021.1	-	632	580	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-400	NZ_CXNQ01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-401	NZ_CXCH01000001.1	-	632	580	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-402	NZ_CXAZ01000023.1	+	39023	39075	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-403	NZ_CXET01000019.1	-	646	594	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-404	NZ_CWYZ01000027.1	-	660	608	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-405	NZ_CXIT01000027.1	-	786	734	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-406	NZ_CWXG01000022.1	+	39104	39156	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-407	NZ_CXBP01000067.1	-	401	349	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-408	NZ_CXHK01000020.1	-	3534	3482	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-409	NZ_CXFE01000028.1	-	695	643	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-410	NZ_CWXY01000026.1	-	862	810	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-411	NZ_CXAU01000013.1	+	43096	43148	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-412	NZ_CXBV01000021.1	+	39007	39059	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-413	NZ_CXNH01000020.1	-	2678	2626	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-414	NZ_CXDM01000029.1	+	37772	37824	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-415	NZ_CXIB01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-416	NZ_CXGA01000026.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-417	NZ_CXJU01000026.1	-	779	727	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-418	NZ_CXMA01000023.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-419	NZ_CXHF01000026.1	-	695	643	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-420	NZ_CWZT01000023.1	+	39094	39146	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-421	NZ_CXGP01000022.1	-	2682	2630	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-422	NZ_CXAK01000025.1	-	662	610	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-423	NZ_CWXL01000027.1	-	664	612	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-424	NZ_CXBB01000103.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-425	NZ_CXMC01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-426	NZ_CXKD01000028.1	-	812	760	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-427	NZ_CWYL01000026.1	-	666	614	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-428	NZ_CXGG01000026.1	-	496	444	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-429	NZ_CWZM01000026.1	-	668	616	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-430	NZ_CXIO01000028.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-431	NZ_CXJJ01000026.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-432	NZ_CXHT01000025.1	-	779	727	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-433	NZ_CXIJ01000028.1	-	793	741	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-434	NZ_CXAD01000025.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-435	NZ_CXOH01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-436	NZ_CXFJ01000027.1	-	637	585	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sso-1-437	NZ_CXJL01000025.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-438	NZ_CXFY01000027.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-439	NZ_CXNL01000026.1	-	799	747	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-440	NZ_CWZS01000023.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-441	NZ_CXAC01000026.1	-	661	609	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-442	NZ_CXKN01000026.1	-	769	717	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-443	NZ_CXCP01000015.1	+	39185	39237	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-444	NZ_CXJS01000017.1	-	1137	1085	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-445	NZ_CXKC01000028.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-446	NZ_CXBK01000055.1	+	20736	20788	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-447	NZ_CXME01000026.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-448	NZ_CXLX01000028.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-449	NZ_CXLU01000028.1	-	695	643	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-450	NZ_CXHV01000025.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-451	NZ_CXHX01000026.1	-	1627	1575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-452	NZ_CXNE01000028.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-453	NZ_CXAO01000026.1	-	529	477	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-454	NZ_CXNO01000025.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-455	NZ_CXGX01000025.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-456	NZ_CXEC01000022.1	-	644	592	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-457	NZ_CWZE01000026.1	-	664	612	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-458	NZ_CXOB01000028.1	-	804	752	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-459	NZ_CWXF01000027.1	+	39104	39156	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-460	NZ_CXCV01000008.1	-	27546	27494	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-461	NZ_CXEV01000018.1	-	2655	2603	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-462	NZ_CXGB01000025.1	-	695	643	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-463	NZ_CXMT01000026.1	-	1627	1575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-464	NZ_CXLH01000027.1	-	800	748	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-465	NZ_CXDW01000020.1	-	2418	2366	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-466	NZ_CXAP01000022.1	+	80220	80272	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-467	NZ_CXNK01000026.1	-	812	760	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-468	NZ_CWYQ01000027.1	+	39041	39093	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-469	NZ_CXMY01000022.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-470	NZ_CWZC01000027.1	-	666	614	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-471	NZ_CXIZ01000027.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-472	NZ_CXMP01000024.1	-	812	760	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-473	NZ_CWYA01000024.1	-	853	801	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-474	NZ_CWYJ01000023.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-475	NZ_CXED01000015.1	+	39085	39137	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-476	NZ_CWXJ01000027.1	-	736	684	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-477	NZ_CXII01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-478	NZ_CXHN01000027.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-479	NZ_CXKX01000025.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-480	NZ_CXKT01000026.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-481	NZ_CXJO01000026.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-482	NZ_CXJX01000030.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-483	NZ_CXLV01000031.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-484	NZ_CWYE01000019.1	-	4838	4786	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-485	NZ_CW XO01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-486	NZ_CXFV01000025.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-487	NZ_CXIE01000027.1	-	1627	1575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-488	NZ_CXKL01000026.1	-	662	610	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sso-1-489	NZ.CWXE01000031.1	-	855	803	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-490	NZ.CXAF01000026.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-491	NZ.CWZN01000027.1	-	664	612	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-492	NZ.CXEK01000014.1	-	644	592	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-493	NZ.CXFN01000026.1	-	481	429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-494	NZ.CXFZ01000023.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-495	NZ.CXCG01000013.1	-	334	282	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-496	NZ.CXNF01000028.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-497	NZ.CXKQ01000026.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-498	NZ.CWYV01000027.1	+	39041	39093	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-499	NZ.CXCM01000057.1	+	20736	20788	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-500	NZ.CXAX01000027.1	+	39023	39075	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-501	NZ.CWXX01000025.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-502	NZ.CXMB01000026.1	-	773	721	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-503	NZ.CXJD01000027.1	-	1539	1487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-504	NZ.CWVY01000017.1	-	799	747	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-505	NZ.CXNA01000027.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-506	NZ.CXGL01000026.1	-	855	803	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-507	NZ.CXJ01000026.1	-	1627	1575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-508	NZ.CWYS01000026.1	-	679	627	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-509	NZ.CWVN01000026.1	-	751	699	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-510	NZ.CWYO01000025.1	+	39093	39145	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-511	NZ.CXMI01000027.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-512	NZ.CXBR01000018.1	+	39007	39059	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-513	NZ.CXOF01000024.1	-	1627	1575	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-514	NZ.CXFU01000025.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-515	NZ.CXFG01000031.1	-	481	429	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-516	NZ.CWYF01000025.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-517	NZ.CXBQ01000065.1	+	20750	20802	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-518	NZ.CXMD01000027.1	-	794	742	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-519	NZ.CXHZ01000022.1	-	2667	2615	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-520	NZ.CXGS01000026.1	-	867	815	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-521	NZ.CXKE01000028.1	-	779	727	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-522	NZ.CXHP01000025.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-523	NZ.CXLW01000026.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-524	NZ.CXEA01000023.1	-	646	594	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-525	NZ.CWZA01000021.1	-	1539	1487	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-526	NZ.CXKZ01000025.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-527	NZ.CXGJ01000025.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-528	NZ.CXOG01000062.1	+	23400	23452	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-529	NZ.CXDF01000021.1	+	39593	39645	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-530	NZ.CXDL01000052.1	-	634	582	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-531	NZ.CXMQ01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-532	NZ.CWXH01000034.1	-	855	803	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-533	NZ.CXAA01000028.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-534	NZ.CWVW01000019.1	+	38339	38391	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-535	NZ.CXJK01000023.1	+	39082	39134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-536	NZ.CXGU01000032.1	-	621	569	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-537	NZ.CXIP01000030.1	+	39045	39097	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-538	NZ.CXKB01000026.1	+	39089	39141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-539	NZ.CXAS01000019.1	-	2634	2582	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-2024-1	NZ.AVRH01000067.1	+	46925	46977	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sdy-2-1	NZ_AURX01000023.1	+	37576	37628	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-2044-1	NZ_AVSN01000121.1	+	44651	44703	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-2-1	NZ_AURV01000019.1	-	39143	39091	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1983-1	NZ_ATKA01000044.1	-	507	455	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Cmi-1-1	NZ_AEJF01000307.1	-	141	89	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1830-1	NZ_AGTI01000011.1	-	722	670	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1778-1	NZ_AGTJ01000006.1	-	39164	39112	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1021-1	NZ_AXLH01000003.1	+	4432498	4432550	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-728-2	NZ_AOUP01000502.1	+	305	357	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-414-1	NZ_ASXQ01000020.1	-	44445	44393	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1919-1	NZ_AQAW01000068.1	+	87681	87733	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-362-1	NZ_AIBH01000033.1	+	107851	107903	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1879-1	NZ_APYX01000072.1	+	118012	118064	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-2176-1	NZ_AQCB01000200.1	+	18734	18786	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-706-1	NZ_JHLN01000031.1	-	655	603	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-914-1	NZ_AWFJ01000105.1	-	1379	1327	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbo-2-4	NZ_JWBP01000001.1	-	474	422	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbo-2-5	NZ_JVYE01000206.1	+	32322	32374	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbo-2-6	NZ_JVNX01000122.1	+	32322	32374	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbo-2-7	NZ_JVJU01000018.1	+	32335	32387	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbo-2-8	NZ_JVYF01000453.1	-	1032	980	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-540	NZ_JVNM01000130.1	+	32400	32452	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbo-2-9	NZ_JVNL01000131.1	+	32406	32458	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1723-1	NZ_AMVT01000005.1	+	85592	85644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1424-1	NZ_ANXO01000041.1	+	11336	11388	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1477-1	NZ_ANYI01000065.1	+	32593	32645	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1491-1	NZ_ANYN01000098.1	+	32501	32553	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1440-1	NZ_ANXU01000077.1	+	32410	32462	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1728-1	NZ_AMVY01000010.1	+	85592	85644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-776-1	NZ_APWZ01000054.1	+	33662	33714	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1878-1	NZ_APYW01000114.1	+	117712	117764	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1907-1	NZ_AQAM01000194.1	+	46822	46874	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-915-1	NZ_AVDU01000093.1	-	2645	2593	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-409-1	NZ_AXOC01000008.1	+	49059	49111	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1982-1	NZ_ATJZ01000076.1	-	954	902	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1144-1	NZ_AHNN01000007.1	+	85918	85970	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-410-1	NZ_AXOD01000008.1	+	49059	49111	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1918-1	NZ_AQAV01000071.1	+	87581	87633	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1870-1	NZ_APYR01000172.1	+	87716	87768	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1923-1	NZ_AQBA01000071.1	+	87684	87736	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1945-1	NZ_AHHO01000057.1	+	58857	58909	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-424-1	NZ_LAYL01000017.1	-	44955	44903	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-229-1	NZ_AYQQ01000021.1	+	32271	32323	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-526-1	NZ_JHFC01000048.1	+	83133	83185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-555-1	NZ_JHFW01000009.1	+	113689	113741	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-523-1	NZ_JHFM01000019.1	-	39110	39058	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-480-1	NZ_JHKU01000042.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-540-1	NZ_JHIJ01000018.1	+	83133	83185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-499-1	NZ_JHHU01000047.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-500-1	NZ_JHHT01000020.1	-	655	603	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-504-1	NZ_JHHP01000019.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-505-1	NZ_JHHO01000094.1	+	88567	88619	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Eco-486-1	NZ_JHFE01000034.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-488-1	NZ_JHMX01000046.1	+	93655	93707	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-483-1	NZ_JHFZ01000080.1	+	88516	88568	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-546-1	NZ_JASO01000010.1	+	2235040	2235092	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-531-1	NZ_JHMG01000006.1	-	39184	39132	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-519-1	NZ_JHGN01000005.1	-	39111	39059	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-485-1	NZ_JHFF01000047.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-527-1	NZ_JHMV01000020.1	-	39111	39059	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-520-1	NZ_JHGL01000022.1	+	83133	83185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-524-1	NZ_JHFL01000061.1	+	83052	83104	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-501-1	NZ_JHHS01000028.1	+	7404	7456	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-507-1	NZ_JHHM01000024.1	-	723	671	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-492-1	NZ_JHMR01000017.1	+	88567	88619	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-511-1	NZ_JASP01000001.1	+	2904157	2904209	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1777-1	NZ_AGTH01000174.1	+	20821	20873	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-530-1	NZ_JHMJ01000018.1	-	39359	39307	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-522-1	NZ_JHGG01000033.1	+	83133	83185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-525-1	NZ_JHFK01000039.1	+	83560	83612	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-512-1	NZ_JHXX01000025.1	-	912	860	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-489-1	NZ_JHMW01000016.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-538-1	NZ_JHJR01000002.1	-	39112	39060	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-482-1	NZ_JHGS01000024.1	+	88528	88580	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-513-1	NZ_JHGP01000041.1	+	79309	79361	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-521-1	NZ_JHGH01000021.1	-	39111	39059	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-481-1	NZ_JHGU01000024.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-502-1	NZ_JHHR01000021.1	-	783	731	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-506-1	NZ_JHHN01000035.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-97-1	NZ_JNPZ01000021.1	+	85592	85644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-493-1	NZ_JHMQ01000031.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-537-1	NZ_JASV01000004.1	+	2866260	2866312	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-102-1	NZ_JNQA01000020.1	+	33535	33587	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-548-2	NZ_AGTL01000019.1	+	67580	67632	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-494-1	NZ_JHMA01000070.1	+	88568	88620	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-86-1	NZ_JNJP01000150.1	+	28740	28792	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-484-1	NZ_JHFG01000005.1	+	88567	88619	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-91-1	NZ_JNPM01000070.1	+	87598	87650	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-554-1	NZ_JHKV01000042.1	+	113307	113359	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-99-1	NZ_JNPO01000013.1	-	27928	27876	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-515-1	NZ_JHNX01000006.1	+	83133	83185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-106-1	NZ_JNQK01000038.1	-	3888	3836	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-516-1	NZ_JHNR01000001.1	+	83133	83185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-118-1	NZ_JNQQ01000016.1	+	88828	88880	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-539-1	NZ_JHIK01000019.1	+	83133	83185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-111-1	NZ_JNQN01000020.1	+	62519	62571	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-541-1	NZ_JHHC01000012.1	+	87650	87702	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-149-1	NZ_JNRO01000012.1	-	41639	41587	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-547-1	NZ_JHHD01000017.1	+	85958	86010	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-503-1	NZ_JHHQ01000058.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-146-1	NZ_JNRM01000006.1	-	129387	129335	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-508-1	NZ_JHHL01000028.1	+	88625	88677	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-152-1	NZ_JNRR01000018.1	+	86382	86434	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-528-1	NZ_JHMO01000008.1	+	83133	83185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Eco-155-1	NZ_JNRS01000020.1	+	88027	88079	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-159-1	NZ_JNRW01000009.1	+	89304	89356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-160-1	NZ_JNRX01000009.1	-	39867	39815	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-154-1	NZ_JONC01000118.1	+	28684	28736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-145-1	NZ_JOSL01000055.1	+	87855	87907	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-161-1	NZ_JNMT01000023.1	-	39691	39639	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-89-1	NZ_JNPH01000081.1	+	88998	89050	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-82-1	NZ_JNPE01000121.1	+	86220	86272	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-78-1	NZ_JNOZ01000062.1	+	87039	87091	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-90-1	NZ_JNPL01000135.1	+	88947	88999	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-105-1	NZ_JNQJ01000010.1	-	39999	39947	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2161-1	NZ_AFVX01000011.1	-	25826	25774	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-119-1	NZ_JNQR01000040.1	+	32316	32368	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-113-1	NZ_JNQO01000012.1	+	89995	90047	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-147-1	NZ_JNRN01000027.1	+	57743	57795	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2035-1	NZ_AELC01000028.1	+	23717	23769	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-156-1	NZ_JNRT01000008.1	-	79980	79928	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-123-1	NZ_JNQV01000020.1	+	88561	88613	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-80-1	NZ_AEKA01000063.1	+	12224	12276	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-115-1	NZ_JOMW01000186.1	+	65886	65938	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-114-1	NZ_JOSP01000088.1	+	88483	88535	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-81-1	NZ_JNPB01000106.1	+	38018	38070	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2158-1	NZ_AGIA01000015.1	-	39247	39195	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-83-1	NZ_JNPF01000067.1	+	87496	87548	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-96-1	NZ_JNPN01000049.1	+	29332	29384	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-98-1	NZ_JNPV01000011.1	-	41495	41443	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-93-1	NZ_JNQF01000020.1	-	1220	1168	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-88-1	NZ_JNQE01000113.1	+	83333	83385	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-104-1	NZ_JNQI01000008.1	-	41038	40986	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-100-1	NZ_JNQH01000013.1	-	26588	26536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-141-1	NZ_JNRK01000010.1	-	40492	40440	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-150-1	NZ_JNRP01000018.1	-	41639	41587	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2040-1	NZ_AELE01000001.1	-	107913	107861	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-157-1	NZ_JNRU01000011.1	+	79676	79728	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-137-1	NZ_JONA01000068.1	+	86290	86342	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-110-1	NZ_JOSN01000103.1	+	61758	61810	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-131-1	NZ_JOSS01000074.1	+	85558	85610	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-79-1	NZ_JNNG01000165.1	+	26964	27016	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-80-1	NZ_JNPA01000051.1	+	87539	87591	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-92-1	NZ_JNPI01000134.1	+	88008	88060	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-85-1	NZ_JNPG01000074.1	+	49989	50041	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-103-1	NZ_JNPW01000018.1	-	1405	1353	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1993-1	NZ_AFDZ01000026.1	+	94461	94513	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1990-1	NZ_AFDQ01000030.1	+	120795	120847	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1995-1	NZ_AFEA01000021.1	+	89529	89581	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2037-1	NZ_AELD01000027.1	-	2133	2081	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1826-1	NZ_AEUB01000054.1	+	92443	92495	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2042-1	NZ_AFEB01000062.1	+	82453	82505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1817-1	NZ_AKBA01000257.1	+	47707	47759	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2025-1	NZ_AFAG02000007.1	+	81627	81679	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2023-1	NZ_AKLT01000016.1	-	3775	3723	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-707-1	NZ_JHFB01000041.1	-	655	603	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-947-1	NZ_AFET01000003.1	+	367780	367832	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1031-1	NZ_AIGT01000034.1	-	907	855	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-732-1	NZ_JHGO01000021.1	+	115572	115624	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1032-1	NZ_AIGU01000065.1	-	4128	4076	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-712-1	NZ_JHGY01000036.1	+	46647	46699	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1036-1	NZ_AIGY01000052.1	+	9545	9597	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-708-1	NZ_JHMS01000030.1	+	47743	47795	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1041-1	NZ_AIHD01000074.1	+	106498	106550	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-698-1	NZ_JHMP01000084.1	-	655	603	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1047-1	NZ_AIHJ01000045.1	+	51483	51535	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1052-1	NZ_AIHO01000050.1	-	3640	3588	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-700-1	NZ_JHMI01000040.1	+	47743	47795	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1782-1	NZ_AGTG01000310.1	+	91692	91744	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-949-1	NZ_AJPQ01000119.1	+	11893	11945	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-691-1	NZ_JHGI01000054.1	+	47743	47795	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1061-1	NZ_AIEZ01000034.1	+	89055	89107	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-724-1	NZ_JFBE01000009.1	+	23451	23503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1033-1	NZ_AIGV01000053.1	+	90417	90469	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-715-1	NZ_JASS01000001.1	-	2254243	2254191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1038-1	NZ_AIHA01000041.1	+	93933	93985	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1043-1	NZ_AIHF01000032.1	+	18538	18590	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-727-1	NZ_JHJX01000130.1	-	5325	5273	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1048-1	NZ_AIHK01000029.1	-	52984	52932	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-573-1	NZ_JHJY01000046.1	-	39120	39068	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1053-1	NZ_AIHP01000031.1	+	126889	126941	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-716-1	NZ_JHNP01000054.1	+	47846	47898	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-907-1	NZ_AEZO02000041.1	-	3273	3221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-720-1	NZ_JHHA01000004.1	-	605	553	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-869-1	NZ_AEZZ02000031.1	+	33807	33859	RNA → ←-hypo
Eco-733-1	NZ_JHGW01000029.1	+	84488	84540	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-719-1	NZ_JHHG01000014.1	-	512	460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-242-1	NZ_JORD01000185.1	+	18741	18793	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-697-1	NZ_JHND01000051.1	+	47743	47795	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-253-1	NZ_JORX01000060.1	+	89329	89381	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-701-1	NZ_JHMF01000044.1	-	655	603	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-559-1	NZ_JHFS01000024.1	+	113298	113350	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-263-1	NZ_JORY01000190.1	+	32400	32452	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1813-1	NZ_JAST01000013.1	+	1682622	1682674	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-250-1	NZ_JOSC01000067.1	+	77673	77725	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-737-1	NZ_AQGP01000014.1	+	46642	46694	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-251-1	NZ_JOSF01000157.1	+	117812	117864	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-738-1	NZ_AQGO01000053.1	-	450	398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-244-1	NZ_JORF01000038.1	+	101362	101414	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-739-1	NZ_AQGN01000068.1	-	469	417	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-558-1	NZ_JHFT01000023.1	+	113389	113441	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1832-1	NZ_ADUQ01000074.1	+	324503	324555	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-269-1	NZ_JORZ01000117.1	+	64110	64162	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1833-1	NZ_ADUR01000080.1	+	18632	18684	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-271-1	NZ_JOSB01000055.1	+	80836	80888	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1821-1	NZ_AJQW01000016.1	-	39344	39292	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-265-1	NZ_JOSD01000063.1	+	87627	87679	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-239-1	NZ_JORC01000094.1	+	89119	89171	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1818-1	NZ_AKBB01000286.1	+	47707	47759	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-391-1	NZ_CCCR010000424.1	-	319	267	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1994-1	NZ_AFEX01000042.1	+	24076	24128	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-709-1	NZ_JHNY01000076.1	+	42083	42135	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1030-1	NZ_AJWV01000005.1	-	430	378	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-556-1	NZ_JHFV01000020.1	-	42199	42147	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-710-1	NZ_JHHJ01000123.1	-	470	418	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-713-1	NZ_JHGJ01000012.1	-	1410	1358	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1034-1	NZ_AIGW01000044.1	+	124125	124177	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-730-1	NZ_JHHF01000016.1	-	470	418	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1039-1	NZ_AIHB01000071.1	+	255720	255772	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-696-1	NZ_JHFD01000005.1	+	47743	47795	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1044-1	NZ_AIHG01000032.1	+	124962	125014	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-588-1	NZ_JHMK01000020.1	-	470	418	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1054-1	NZ_AIHQ01000029.1	+	28373	28425	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-561-1	NZ_JHFQ01000010.1	-	41718	41666	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-731-1	NZ_JASQ01000001.1	+	2087491	2087543	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-289-2	NZ_AMSK01000022.1	-	39312	39260	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1822-1	NZ_AGTK01000047.1	-	658	606	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-562-1	NZ_JHFP01000015.1	+	113491	113543	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-988-1	NZ_AFAH02000005.1	+	348627	348679	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-243-1	NZ_JORE01000086.1	+	18702	18754	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1984-1	NZ_AJFG01000039.1	+	32298	32350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-264-1	NZ_JORV01000162.1	+	86327	86379	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-273-1	NZ_JOSA01000051.1	+	84041	84093	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-721-1	NZ_JHJW01000066.1	+	34177	34229	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-256-1	NZ_JOSG01000075.1	+	49467	49519	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-722-1	NZ_JHJU01000002.1	-	39350	39298	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-270-1	NZ_JOSQ01000141.1	+	63861	63913	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-714-1	NZ_JHF101000013.1	-	1185	1133	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-858-1	NZ_AJW01000023.1	+	86064	86116	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-690-1	NZ_JHGK01000050.1	+	47735	47787	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-564-1	NZ_JHFN01000056.1	-	42067	42015	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1062-1	NZ_AFJB01000037.1	+	88476	88528	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1035-1	NZ_AIGX01000036.1	-	2477	2425	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-717-1	NZ_JASN01000012.1	-	1273280	1273228	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1784-1	NZ_AHZD02000014.1	+	121770	121822	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1040-1	NZ_AIHC01000084.1	+	46886	46938	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-836-1	NZ_AEZO02000010.1	+	2298721	2298773	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1045-1	NZ_AIHH01000059.1	+	123112	123164	RNA → ←-hypo
Eco-846-1	NZ_AEZX02000008.1	-	166424	166372	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1046-1	NZ_AIHI01000030.1	+	123842	123894	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-172-1	NZ_JNMD01000017.1	+	34663	34715	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1051-1	NZ_AIHN01000068.1	+	65831	65883	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1055-1	NZ_AIHR01000030.1	+	127087	127139	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-181-1	NZ_JNMI01000027.1	+	34751	34803	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1056-1	NZ_AIHS01000050.1	+	28401	28453	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-187-1	NZ_JNMS01000012.1	+	85669	85721	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-560-1	NZ_JHFR01000019.1	+	113461	113513	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-186-1	NZ_JNMW01000014.1	-	40226	40174	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-6-1	NZ_JHDM01000084.1	+	28050	28102	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-165-1	NZ_JNSA01000020.1	+	34427	34479	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Eco-3-1	NZ_JHDP01000068.1	+	89417	89469	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-178-1	NZ_JOND01000226.1	+	84724	84776	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-4-1	NZ_JHDO01000123.1	+	86211	86263	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-567-1	NZ_JHMH01000011.1	+	46647	46699	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-26-1	NZ_JJLM01000079.1	+	84269	84321	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-227-1	NZ_JOST01000207.1	+	86014	86066	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-557-1	NZ_JHFU01000017.1	+	113389	113441	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-208-1	NZ_JOQH01000012.1	+	90856	90908	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-16-1	NZ_JJLQ01000099.1	+	22129	22181	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-188-1	NZ_JOQL01000012.1	+	86189	86241	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-70-1	NZ_JMGU01000105.1	+	89454	89506	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-217-1	NZ_JOQQ01000012.1	+	89454	89506	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-66-1	NZ_JMGQ01000119.1	+	100759	100811	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-237-1	NZ_JORA01000046.1	+	102409	102461	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-75-1	NZ_JNNE01000139.1	+	56087	56139	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-38-1	NZ_JNPP01000004.1	-	40299	40247	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-175-1	NZ_JNME01000058.1	+	23766	23818	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-167-1	NZ_JNMA01000015.1	+	93888	93940	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-35-1	NZ_JNPT01000021.1	-	857	805	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-189-1	NZ_JNMJ01000009.1	+	86006	86058	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-32-1	NZ_JOSR01000127.1	+	33305	33357	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-169-1	NZ_JNMO01000007.1	+	57000	57052	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-9-1	NZ_JHDJ01000187.1	+	22118	22170	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-194-1	NZ_JNMX01000008.1	+	70796	70848	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-2-1	NZ_JHDQ01000081.1	+	87608	87660	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-203-1	NZ_JNMY01000024.1	+	32464	32516	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-18-1	NZ_JJLI01000182.1	+	22109	22161	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-166-1	NZ_JNSB01000008.1	+	70954	71006	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-31-1	NZ_JJLU01000129.1	+	67734	67786	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-23-1	NZ_JJLT01000167.1	+	11783	11835	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-190-1	NZ_JOQC01000020.1	-	721	669	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-20-1	NZ_JMGS01000101.1	+	86002	86054	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-228-1	NZ_JOQM01000023.1	-	39867	39815	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-72-1	NZ_JNNC01000114.1	+	14514	14566	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-222-1	NZ_JOQU01000013.1	+	88168	88220	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-76-1	NZ_JJNF01000065.1	+	87059	87111	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-60-1	NZ_JNPQ01000048.1	+	19619	19671	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-225-1	NZ_JOQW01000020.1	+	88702	88754	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-36-1	NZ_JNPU01000018.1	-	2206	2154	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-14-1	NZ_JHDG01000181.1	+	40836	40888	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-851-1	NZ_AJWQ01000257.1	-	598	546	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-10-1	NZ_JHDI01000087.1	+	22108	22160	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-854-1	NZ_AJWS01000002.1	+	64656	64708	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-7-1	NZ_JHDL01000086.1	+	28654	28706	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-25-1	NZ_JJLP01000055.1	+	84896	84948	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-850-1	NZ_AJWR01000026.1	+	46611	46663	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-41-1	NZ_JJLK01000087.1	+	85941	85993	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-24-1	NZ_JJLS01000289.1	+	11674	11726	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-176-1	NZ_JNMF01000033.1	+	22119	22171	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-168-1	NZ_JNMB01000027.1	-	39867	39815	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-71-1	NZ_JMGV01000071.1	+	89398	89450	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-183-1	NZ_JNMG01000025.1	-	39785	39733	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Eco-74-1	NZ_JMGR01000079.1	+	88902	88954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-193-1	NZ_JNMK01000014.1	-	41267	41215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-69-1	NZ_JNNB01000156.1	+	86845	86897	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-170-1	NZ_JNML01000017.1	+	87682	87734	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-73-1	NZ_JNND01000109.1	+	14502	14554	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-173-1	NZ_JNMP01000063.1	+	24046	24098	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-62-1	NZ_JNPR01000049.1	+	19639	19691	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-184-1	NZ_JNMQ01000015.1	+	86809	86861	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-182-1	NZ_JNMU01000024.1	+	34648	34700	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-210-1	NZ_JNMZ01000011.1	+	86362	86414	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-162-1	NZ_JNRY01000050.1	-	2050	1998	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-5-1	NZ_JHDN01000076.1	+	28050	28102	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-233-1	NZ_JOMS01000137.1	+	91874	91926	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-206-1	NZ_JOQJ01000013.1	-	27977	27925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-11-1	NZ_JHDH01000162.1	+	32464	32516	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-8-1	NZ_JHDK01000152.1	+	93103	93155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-221-1	NZ_JOQT01000016.1	+	86416	86468	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-65-1	NZ_JJLJ01000063.1	+	26558	26610	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-238-1	NZ_JORB01000073.1	+	90314	90366	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-27-1	NZ_JJLH01000058.1	+	85415	85467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-842-1	NZ_ADUM01000088.1	+	46158	46210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-840-1	NZ_AFAF02000002.1	-	554932	554880	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-64-1	NZ_JJLN01000275.1	+	26565	26617	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-164-1	NZ_JNLZ01000007.1	-	39917	39865	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-39-1	NZ_JJLR01000144.1	+	78890	78942	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-171-1	NZ_JNMC01000016.1	-	40179	40127	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-17-1	NZ_JMGW01000087.1	+	22117	22169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-185-1	NZ_JNMH01000014.1	+	86284	86336	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-61-1	NZ_JMGT01000069.1	+	65843	65895	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-177-1	NZ_JNMM01000020.1	-	792	740	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-179-1	NZ_JNMR01000020.1	+	88701	88753	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-37-1	NZ_JNPY01000004.1	-	40945	40893	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-63-1	NZ_JNPS01000013.1	+	89385	89437	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-180-1	NZ_JNMV01000024.1	+	32368	32420	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1759-1	NZ_AFWP01000188.1	+	84134	84186	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1707-1	NZ_AEFA01000012.1	-	52072	52020	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1775-1	NZ_AKAV01000113.1	+	88546	88598	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-685-1	NZ_JHOE01000044.1	-	821	769	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-679-1	NZ_JHOC01000057.1	+	22349	22401	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-676-1	NZ_JHJJ01000015.1	-	3338	3286	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1100-1	NZ_AIGO01000057.1	-	3488	3436	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1704-1	NZ_ADWQ01000019.1	+	85972	86024	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-681-1	NZ_JHJV01000007.1	+	82800	82852	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1105-1	NZ_ADUO01000104.1	-	534	482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1717-1	NZ_AJVQ01000020.1	+	3811	3863	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1774-1	NZ_AJVV01000390.1	-	417	365	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1390-1	NZ_AJWO01000023.1	+	65109	65161	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1391-1	NZ_AJWP01000137.1	-	430	378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1096-1	NZ_AIGK01000064.1	-	794	742	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1097-1	NZ_AIGL01000055.1	-	4074	4022	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-470-1	NZ_JHJZ01000022.1	-	1543	1491	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-476-1	NZ_JHJS01000024.1	+	88763	88815	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-467-1	NZ_JHNC01000043.1	-	1014	962	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-473-1	NZ_JHGR01000007.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-477-1	NZ_JFGU01000002.1	-	450	398	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1807-1	NZ_AETX01000108.1	+	33794	33846	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-678-1	NZ_JHNW01000023.1	+	24132	24184	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1683-1	NZ_ADWU01000058.1	-	1253	1201	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1716-1	NZ_AJVR01000251.1	+	46629	46681	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1146-1	NZ_AKNI01000042.1	+	23288	23340	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1386-1	NZ_AEZV02000042.1	-	584	532	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-680-1	NZ_JHMZ01000045.1	-	1193	1141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-465-1	NZ_JH FY01000094.1	-	1174	1122	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1708-1	NZ_AJMB01000085.1	-	3692	3640	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-689-1	NZ_JHGV01000084.1	+	47743	47795	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1709-1	NZ_AJLU01000016.1	+	86588	86640	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1718-1	NZ_AGSG01000243.1	-	3943	3891	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1685-1	NZ_ADWS01000023.1	+	66459	66511	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-675-1	NZ_JHMM01000008.1	-	42766	42714	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1678-1	NZ_ADWV01000042.1	+	23555	23607	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1168-1	NZ_AFDX01000043.1	+	38823	38875	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-684-1	NZ_JHNT01000082.1	-	502	450	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1147-1	NZ_AKNH01000066.1	+	82725	82777	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-686-1	NZ_JHNO01000045.1	-	512	460	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1099-1	NZ_AIGN01000060.1	+	126535	126587	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-158-1	NZ_JNRV01000013.1	+	57668	57720	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-464-1	NZ_JHOD01000035.1	+	86530	86582	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-479-1	NZ_JHNS01000069.1	+	88567	88619	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-163-1	NZ_JNRZ01000023.1	-	25355	25303	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-395-1	NZ_JDFV01000023.1	+	87347	87399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-475-1	NZ_JHLU01000058.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-223-1	NZ_JONE01000058.1	+	88201	88253	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-245-1	NZ_JORG01000123.1	+	101921	101973	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-247-1	NZ_JORH01000200.1	+	86694	86746	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-240-1	NZ_JORK01000124.1	+	87639	87691	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-252-1	NZ_JORP01000053.1	+	90001	90053	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-267-1	NZ_JOSE01000067.1	+	87144	87196	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-272-1	NZ_JOSH01000129.1	+	81087	81139	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-204-1	NZ_JOQF01000011.1	+	90131	90183	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-219-1	NZ_JOQP01000016.1	+	89457	89509	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-235-1	NZ_JOQZ01000040.1	+	101316	101368	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1131-1	NZ_AMFM01000015.1	+	87827	87879	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1148-1	NZ_ADUN01000112.1	-	1762	1710	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-261-1	NZ_JORU01000067.1	+	89179	89231	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-218-1	NZ_JOQO01000026.1	-	26793	26741	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-216-1	NZ_JOQS01000013.1	-	41073	41021	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1094-1	NZ_AIGI01000048.1	+	48588	48640	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-241-1	NZ_JORT01000089.1	+	19614	19666	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-220-1	NZ_JOQN01000016.1	+	89415	89467	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-276-1	NZ_JOMV01000046.1	+	83575	83627	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-236-1	NZ_JONF01000114.1	+	103257	103309	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-266-1	NZ_JORW01000076.1	+	87173	87225	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-207-1	NZ_JOQK01000011.1	-	35712	35660	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1083-1	NZ_AIFV01000036.1	+	89358	89410	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Eco-1088-1	NZ_AIGC01000024.1	+	89715	89767	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-417-1	NZ_CBWC01000015.1	+	4177	4229	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-255-1	NZ_JORS01000088.1	+	49497	49549	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-192-1	NZ_JOQE01000031.1	-	1379	1327	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-209-1	NZ_JOQI01000010.1	-	40093	40041	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-215-1	NZ_JDWT01000016.1	+	52138	52190	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-215-2	NZ_JDWT01000047.1	-	39821	39769	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-246-1	NZ_JORM01000046.1	+	101824	101876	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-394-1	NZ_JDFU02000010.1	+	2149849	2149901	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-268-1	NZ_JDWS01000004.1	-	53977	53925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1133-1	NZ_AERU01000031.1	-	830	778	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1081-1	NZ_AIFT01000041.1	+	95082	95134	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-248-1	NZ_JORJ01000139.1	+	86559	86611	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-262-1	NZ_JORO01000129.1	+	89396	89448	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-191-1	NZ_JOQD01000045.1	+	30376	30428	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-214-1	NZ_JDWU01000026.1	-	39906	39854	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-677-1	NZ_APWX01000006.1	-	577	525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-274-1	NZ_JOMT01000130.1	+	83847	83899	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-254-1	NZ_JORQ01000056.1	+	89943	89995	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-232-1	NZ_JOQR01000016.1	-	19180	19128	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1079-1	NZ_AIFR01000051.1	+	95532	95584	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-275-1	NZ_JOMU01000122.1	+	80876	80928	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-249-1	NZ_JORI01000142.1	+	119549	119601	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-260-1	NZ_JORN01000052.1	+	89277	89329	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-205-1	NZ_JOQG01000029.1	+	32464	32516	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-687-1	NZ_JHGZ01000099.1	-	578	526	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2033-1	NZ_AELA01000036.1	+	35234	35286	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-718-1	NZ_JHLA01000019.1	-	579	527	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-726-1	NZ_JHNZ01000062.1	+	26430	26482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-711-1	NZ_JHOA01000076.1	+	46647	46699	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-683-1	NZ_JHGM01000054.1	-	606	554	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1823-1	NZ_AEUA01000081.1	+	92414	92466	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2154-1	NZ_AGTD01000001.1	+	4670150	4670202	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2159-1	NZ_AERT01000012.1	-	53530	53478	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1992-1	NZ_AFDW01000036.1	+	90212	90264	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1980-1	NZ_ADUS01000024.1	-	43866	43814	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-729-1	NZ_JHNJ01000021.1	-	736	684	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-695-1	NZ_JHFH01000073.1	+	47743	47795	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-705-1	NZ_JHLS01000064.1	-	1472	1420	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-699-1	NZ_JHMN01000069.1	-	583	531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-688-1	NZ_JHGX01000054.1	-	576	524	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-702-1	NZ_JHLY01000043.1	-	1068	1016	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1808-1	NZ_AEUC01000085.1	+	33893	33945	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-101-1	NZ_JNPX01000067.1	-	682	630	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-725-1	NZ_JHNM01000060.1	+	23451	23503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-87-1	NZ_JNQD01000204.1	+	80611	80663	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-694-1	NZ_JHFJ01000058.1	-	533	481	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-117-1	NZ_JNQP01000014.1	-	27805	27753	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2160-1	NZ_AFYG01000012.1	-	39376	39324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-107-1	NZ_JNQL01000039.1	-	855	803	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-692-1	NZ_JHGA01000065.1	+	47743	47795	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-144-1	NZ_JNRL01000006.1	+	89192	89244	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-693-1	NZ_JHFX01000110.1	+	47743	47795	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-151-1	NZ_JNRQ01000020.1	+	39986	40038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-703-1	NZ_JHLX01000056.1	+	47743	47795	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-77-1	NZ_JOSJ01000091.1	+	87648	87700	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-109-1	NZ_JOSM01000256.1	+	61749	61801	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-94-1	NZ_JOSO01000082.1	+	87720	87772	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-19-1	NZ_JJMD01000081.1	+	88208	88260	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-22-1	NZ_JJLV01000287.1	+	11761	11813	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-129-1	NZ_JNRA01000017.1	-	46298	46246	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-138-1	NZ_JNRE01000016.1	+	86382	86434	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-139-1	NZ_JNRF01000030.1	+	21849	21901	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-59-1	NZ_JJLZ01000070.1	+	85773	85825	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-13-1	NZ_JJLY01000090.1	+	89272	89324	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-136-1	NZ_JNRD01000020.1	+	34619	34671	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-143-1	NZ_JNRI01000010.1	+	89453	89505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-116-1	NZ_JOMX01000149.1	+	65251	65303	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-12-1	NZ_JJMA01000084.1	+	86866	86918	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-135-1	NZ_JNRC01000019.1	+	34683	34735	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-142-1	NZ_JNRH01000010.1	-	34510	34458	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-133-1	NZ_JOMZ01000112.1	+	82463	82515	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-125-1	NZ_JNRJ01000025.1	-	1790	1738	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-112-1	NZ_JORR01000098.1	+	83115	83167	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-48-1	NZ_JDWR01000004.1	+	79506	79558	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-57-1	NZ_JJME01000073.1	+	85793	85845	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-121-1	NZ_JNQY01000021.1	-	40206	40154	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-127-1	NZ_JNQY01000020.1	+	85463	85515	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-67-1	NZ_JJMB01000084.1	+	90394	90446	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-58-1	NZ_JJMC01000070.1	+	88903	88955	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-128-1	NZ_JNQZ01000017.1	-	39492	39440	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-132-1	NZ_JOSU01000161.1	+	79731	79783	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-47-1	NZ_JDWW01000542.1	+	14061	14113	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-788-1	NZ_AFDS01000072.1	+	396474	396526	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-21-1	NZ_JJLX01000084.1	+	87592	87644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-126-1	NZ_JNQX01000020.1	+	84700	84752	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-134-1	NZ_JNRB01000021.1	-	40829	40777	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-140-1	NZ_JNRG01000015.1	+	56974	57026	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-787-1	NZ_ADUL01000081.1	-	7831	7779	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-108-1	NZ_JNQM01000040.1	+	22863	22915	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-124-1	NZ_JNQW01000036.1	-	713	661	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-130-1	NZ_JOMY01000091.1	+	84423	84475	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1761-1	NZ_AFSO01000036.1	+	85014	85066	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1782-2	NZ_LAETY01000099.1	+	33905	33957	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1725-1	NZ_AMVV01000014.1	+	85592	85644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-201-1	NZ_AYQP01000023.1	+	21352	21404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1946-1	NZ_AHHP01000059.1	-	430	378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-412-1	NZ_AXOA01000007.1	+	49060	49112	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-51-1	NZ_AYQI01000015.1	-	487	435	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-56-1	NZ_AYQX01000041.1	-	449	397	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1783-1	NZ_AETZ01000105.1	+	33906	33958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1724-1	NZ_AMVU01000007.1	+	85592	85644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1730-1	NZ_AMVZ01000013.1	+	85592	85644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-487-1	NZ_JHMY01000014.1	-	451	399	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-474-1	NZ_JHGB01000047.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1758-1	NZ_AFWO01000116.1	-	450	398	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1729-1	NZ_AMWA01000009.1	+	85592	85644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-471-1	NZ_JHLJ01000007.1	-	470	418	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-565-1	NZ_JHNA01000056.1	-	42099	42047	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-497-1	NZ_JHLO01000076.1	+	88545	88597	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-466-1	NZ_JHHE01000034.1	-	605	553	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-568-1	NZ_JHLP01000031.1	+	47300	47352	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-498-1	NZ_JHLM01000051.1	+	88567	88619	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1722-1	NZ_AMVS01000017.1	+	85592	85644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1727-1	NZ_AMVX01000007.1	+	85592	85644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-533-1	NZ_JHMB01000009.1	-	39184	39132	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-469-1	NZ_JHNB01000020.1	-	1265	1213	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-532-1	NZ_JHMC01000004.1	-	39111	39059	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-478-1	NZ_JHNU01000036.1	+	88567	88619	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-534-1	NZ_JHLZ01000024.1	+	83133	83185	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-495-1	NZ_JHLW01000035.1	+	88567	88619	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-490-1	NZ_JHMU01000039.1	+	88567	88619	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1384-1	NZ_AICK01000040.1	-	39344	39292	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1432-1	NZ_ANXR01000072.1	+	32531	32583	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-536-1	NZ_JHLR01000009.1	-	39111	39059	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-510-1	NZ_JHNC01000139.1	+	28051	28103	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-529-1	NZ_JHML01000050.1	+	83085	83137	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-517-1	NZ_JHNN01000023.1	-	39183	39131	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-518-1	NZ_JHGT01000031.1	-	39111	39059	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-496-1	NZ_JHLQ01000067.1	-	450	398	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-548-1	NZ_JHEY01000018.1	+	113832	113884	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-535-1	NZ_JHLT01000018.1	-	39183	39131	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-553-1	NZ_JHNN01000013.1	+	113307	113359	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-491-1	NZ_JHMT01000080.1	-	451	399	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-404-1	NZ_AYRC01000021.1	+	87436	87488	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-425-1	NZ_AYOO01000016.1	-	44972	44920	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-413-1	NZ_AXOB01000006.1	+	49060	49112	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-197-1	NZ_AYQM01000023.1	-	26396	26344	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-277-1	NZ_AYQR01000023.1	+	20893	20945	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-53-1	NZ_AYQJ01000020.1	-	711	659	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-54-1	NZ_AYQK01000016.1	+	82842	82894	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-199-1	NZ_AYQL01000015.1	-	491	439	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-257-1	NZ_AYQV01000040.1	+	41491	41543	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1645-1	NZ_AYNG01000007.1	-	46298	46246	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1644-1	NZ_AYNF01000011.1	-	52703	52651	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-200-1	NZ_AYQO01000044.1	+	32235	32287	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-148-1	NZ_AYQZ01000048.1	-	449	397	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-213-1	NZ_AYQT01000039.1	-	417	365	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-411-1	NZ_AXOE01000008.1	+	49059	49111	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-283-1	NZ_AYQY01000014.1	+	43050	43102	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-294-1	NZ_AYMX02000444.1	+	47725	47777	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-958-1	NZ_AYRW01000368.1	-	39239	39187	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-259-1	NZ_AYQN01000026.1	+	32272	32324	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1643-1	NZ_AYNJ01000061.1	+	92332	92384	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-401-1	NZ_AYJY01000016.1	+	113253	113305	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-85-1	NZ_AFGW01000061.1	-	44611	44559	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sbo-12-1	NZ_AKNB01000294.1	+	56283	56335	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-61-1	NZ_AFHD01000041.1	-	49743	49691	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-65-1	NZ_AFHC01000055.1	-	49661	49609	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbo-14-1	NZ_AERN01000044.1	-	696	644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-8-1	NZ_AKND01000057.1	+	87100	87152	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sdy-4-1	NZ_AKNG01000073.1	+	16736	16788	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-9-1	NZ_AKNE01000079.1	+	32321	32373	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-25-11	NZ_CELV01000020.1	-	31220	31168	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbo-13-1	NZ_AFGE01000068.1	+	90513	90565	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-403-1	NZ_AYKB01000016.1	+	113255	113307	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-405-1	NZ_AYKC01000030.1	-	39439	39387	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-400-1	NZ_AYJZ01000015.1	+	113245	113297	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-407-1	NZ_AYKE01000042.1	-	919	867	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-198-1	NZ_AYQS01000013.1	-	28061	28009	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-55-1	NZ_AYJX01000022.1	+	32282	32334	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-406-1	NZ_AYKD01000019.1	-	489	437	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-957-1	NZ_AZCA01000201.1	+	46647	46699	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-279-1	NZ_AYRB01000533.1	+	1654	1706	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-292-1	NZ_AWXM02000304.1	+	113311	113363	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1382-1	NZ_CBWH01000046.1	+	79652	79704	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-416-1	NZ_CBWG010000182.1	+	65101	65153	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-32-1	NZ_AZIO01000027.1	-	31127	31075	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-30-1	NZ_AZOS01000026.1	+	24428	24480	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-22-1	NZ_AZPX01000049.1	+	24428	24480	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-67-1	NZ_AZPG01000200.1	-	27825	27773	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-59-1	NZ_AZPW01000280.1	-	31364	31312	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-34-1	NZ_AZOO01000003.1	-	31133	31081	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-48-1	NZ_AZOP01000079.1	-	31135	31083	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-37-1	NZ_AZOU01000070.1	+	24432	24484	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-49-1	NZ_AZOY01000093.1	-	31123	31071	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-27-1	NZ_AZPE01000102.1	-	31292	31240	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-60-1	NZ_AZPY01000287.1	-	31486	31434	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-84-1	NZ_AZQD01000281.1	-	31338	31286	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-41-1	NZ_AZQO01000079.1	+	24434	24486	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-21-1	NZ_AZOV01000067.1	+	24434	24486	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-13-1	NZ_AZPP01000004.1	-	31121	31069	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-36-1	NZ_AZJO01000046.1	+	24432	24484	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-4-1	NZ_AZPK01000077.1	+	24436	24488	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-43-1	NZ_AZQE01000091.1	+	24436	24488	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-24-1	NZ_AZPZ01000091.1	-	31117	31065	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-2-1	NZ_AZPH01000073.1	+	24422	24474	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-83-1	NZ_AZQC01000174.1	-	31492	31440	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-15-1	NZ_AZOZ01000072.1	-	31133	31081	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-23-1	NZ_AZON01000035.1	-	31133	31081	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-7-1	NZ_AZPL01000292.1	+	24472	24524	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-28-1	NZ_AZPF01000209.1	+	24439	24491	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-16-1	NZ_AZPS01000215.1	-	31471	31419	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-40-1	NZ_AZOX01000009.1	-	31131	31079	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-10-1	NZ_AZPC01000017.1	-	31131	31079	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-8-1	NZ_AZPM01000105.1	+	24432	24484	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-11-1	NZ_AZPN01000265.1	-	31305	31253	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-6-1	NZ_AZQH01000008.1	+	24424	24476	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Sfl-54-1	NZ_AZPO01000232.1	+	24480	24532	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-18-1	NZ_AZPT01000020.1	+	24494	24546	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-9-1	NZ_AZQI01000099.1	+	24519	24571	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-42-1	NZ_AZOM01000009.1	-	31135	31083	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-50-1	NZ_AZPB01000027.1	-	31121	31069	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-14-1	NZ_AZPQ01000273.1	-	31360	31308	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-5-1	NZ_AZQG01000007.1	+	24424	24476	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-58-1	NZ_AZPV01000133.1	+	24550	24602	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-81-1	NZ_AZQA01000184.1	-	31349	31297	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-35-1	NZ_AZOG01000027.1	-	31129	31077	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-47-1	NZ_AZOR01000045.1	+	24434	24486	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-29-1	NZ_AZPA01000041.1	-	31191	31139	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-33-1	NZ_AZOW01000075.1	+	24434	24486	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-31-1	NZ_AZQF01000166.1	-	31137	31085	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-12-1	NZ_AZQJ01000145.1	+	24571	24623	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-397-1	NZ_AONF01000012.1	-	41676	41624	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-56-1	NZ_AZPU01000275.1	+	24653	24705	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-52-1	NZ_AZPJ01000292.1	-	31282	31230	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-38-1	NZ_AZOH01000090.1	+	24430	24482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-39-1	NZ_AZOK01000053.1	+	24432	24484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-3-1	NZ_AZPI01000293.1	+	24420	24472	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-46-1	NZ_AZOT01000006.1	+	24434	24486	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-44-1	NZ_AZOL01000016.1	-	31123	31071	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-19-1	NZ_AZQL01000102.1	+	24428	24480	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-45-1	NZ_AZQB01000275.1	-	31288	31236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-26-1	NZ_AZPD01000034.1	-	31130	31078	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-20-1	NZ_AZQM01000042.1	+	24424	24476	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-459-1	NZ_JEM01000046.1	-	52620	52568	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-17-1	NZ_AZK01000022.1	-	31129	31077	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-55-1	NZ_AZPR01000289.1	+	24486	24538	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-541	NZ_CXFM01000027.1	+	39045	39097	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-542	NZ_CXKK01000025.1	-	790	738	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-543	NZ_CXBE01000023.1	+	39030	39082	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-544	NZ_CXJY01000028.1	+	39089	39141	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sdy-3-1	NZ_AAMJ02000013.1	-	49902	49850	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-752-2	NC_000913.3	+	4126954	4127006	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2153-1	NC_011751.1	+	4613769	4613821	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1829-1	NC_017634.1	+	4166613	4166665	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1380-1	NC_011750.1	-	3185961	3185909	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1742-1	NC_018658.1	-	5023166	5023114	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sdy-8-1	NC_007606.1	-	3539800	3539748	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-63-1	NC_004337.2	+	4142031	4142083	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-66-1	NC_008258.1	+	4113206	4113258	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sbo-18-1	NC_007613.1	+	3980530	3980582	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1986-1	NC_013654.1	+	4115387	4115439	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1985-1	NC_011415.1	+	4388453	4388505	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1020-1	NC_012759.1	+	4014646	4014698	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-53-1	NC_017328.1	+	4181705	4181757	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1988-1	NC_010498.1	+	4465819	4465871	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1019-1	NC_012947.1	-	4307595	4307543	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1445-1	NZ_ANXX01000089.1	+	65724	65776	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1448-1	NZ_ANXY01000069.1	+	80032	80084	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1466-1	NZ_ANYE01000075.1	+	93209	93261	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1455-1	NZ_ANYB01000068.1	+	87346	87398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1444-1	NZ_ANXW01000101.1	+	98443	98495	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1642-1	NZ_ANZA01000057.1	+	32586	32638	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1637-1	NZ_ANYX01000066.1	+	32374	32426	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1468-1	NZ_ANYF01000041.1	+	32366	32418	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1463-1	NZ_ANYD01000058.1	+	32368	32420	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1494-1	NZ_ANYP01000077.1	+	65180	65232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1480-1	NZ_ANYJ01000072.1	+	85888	85940	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1631-1	NZ_ANYV01000057.1	+	77047	77099	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1556-1	NZ_ANYS01000075.1	+	27826	27878	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1019-2	NC_012971.2	+	4034877	4034929	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-948-1	NC_017631.1	+	4515506	4515558	RNA → ←-hypo
Eco-1019-3	NC_012892.2	+	4034871	4034923	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2157-1	NC_017635.1	+	4385130	4385182	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-12-1	NC_007384.1	+	4340994	4341046	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-755-1	NC_017626.1	+	4599214	4599266	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1392-1	NC_016902.1	-	4641114	4641062	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2180-1	NC_017652.1	+	4468480	4468532	RNA → ←-hypo
Eco-2181-1	NC_017651.1	+	4468480	4468532	RNA → ←-hypo
Sso-10-1	NC_016822.1	+	4496466	4496518	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1944-1	NC_017663.1	+	4432216	4432268	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2157-2	NC_017664.1	+	4381611	4381663	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1706-1	NC_017644.1	+	4189500	4189552	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1825-1	NC_017656.1	+	4724417	4724469	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1740-1	NC_018650.1	-	5003301	5003249	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1392-2	NC_017660.1	-	593611	593559	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1741-1	NC_018661.1	-	5062731	5062679	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-951-1	NC_020163.1	+	85695	85747	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1101-1	NC_017625.1	-	4387516	4387464	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1652-1	NC_022364.1	+	4304568	4304620	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1109-1	NC_009801.1	+	4454628	4454680	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1387-1	NC_022648.1	+	4479116	4479168	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-723-1	NZ_AUZO01000108.1	+	34252	34304	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-68-1	NZ_CM001474.1	+	4119177	4119229	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2155-1	NC_017641.1	+	4645410	4645462	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2184-1	NZ_CM000960.1	+	4124944	4124996	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-983-1	NZ_GG749342.1	+	87874	87926	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-976-1	NZ_GG749188.1	+	127059	127111	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1699-1	NZ_GG774371.1	+	80684	80736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-26-1	NZ_GG657392.1	+	88633	88685	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1166-1	NZ_GG774918.1	+	89061	89113	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1691-1	NZ_GG774248.1	-	52196	52144	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1698-1	NZ_GG774461.1	+	64498	64550	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1694-1	NZ_GG771479.1	+	22528	22580	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-960-1	NZ_GG749150.1	+	85259	85311	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1682-1	NZ_GG772852.1	-	462	410	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1703-1	NZ_GG771679.1	+	85822	85874	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1697-1	NZ_GG772206.1	+	32504	32556	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1700-1	NZ_GG772413.1	+	25779	25831	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-864-1	NZ_GG669103.1	-	52064	52012	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1167-1	NZ_GG749232.1	+	86937	86989	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1689-1	NZ_GG773609.1	+	32438	32490	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1695-1	NZ_GG773824.1	+	80487	80539	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1680-1	NZ_GG771822.1	+	86729	86781	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1696-1	NZ_GG772729.1	-	13634	13582	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1687-1	NZ_GG773153.1	+	81002	81054	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1701-1	NZ_GG773309.1	+	104840	104892	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1690-1	NZ_GG771886.1	-	460	408	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1686-1	NZ_GG772092.1	+	44158	44210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1692-1	NZ_GG772571.1	-	108651	108599	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-420-1	NZ_KK097726.1	+	80911	80963	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-326-1	NZ_KK214059.1	+	80697	80749	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1027-1	NZ_KI543994.1	+	87495	87547	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1026-1	NZ_KI543649.1	+	4300	4352	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1028-1	NZ_KI544375.1	+	34333	34385	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1746-1	NZ_KB021558.1	+	84299	84351	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-921-1	NZ_KB003425.1	+	91671	91723	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1747-1	NZ_KB021571.1	+	180804	180856	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1752-1	NZ_KB021472.1	+	181474	181526	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1649-1	NZ_KB223477.1	+	2193206	2193258	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1756-1	NZ_KB021464.1	+	85592	85644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1750-1	NZ_KB021485.1	+	184834	184886	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-308-1	NZ_KK736286.1	+	196918	196970	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-458-1	NZ_KK736506.1	+	3269686	3269738	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-315-1	NZ_KK736338.1	+	4058460	4058512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-389-1	NZ_KK736486.1	+	209675	209727	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-322-1	NZ_KK736423.1	+	93266	93318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-321-1	NZ_KK736416.1	+	82463	82515	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-741-1	NZ_KK736534.1	+	86741	86793	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-323-1	NZ_KK736437.1	+	2266431	2266483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-313-1	NZ_KK736322.1	+	80906	80958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-740-1	NZ_KK736517.1	+	486722	486774	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-319-1	NZ_KK736385.1	+	87501	87553	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-324-1	NZ_KK736448.1	+	115918	115970	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-318-1	NZ_KK736372.1	+	2909588	2909640	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-744-1	NZ_KK736563.1	+	1241877	1241929	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-457-1	NZ_KK736497.1	+	90449	90501	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-387-1	NZ_KK736462.1	+	115174	115226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-311-1	NZ_KK736301.1	+	195414	195466	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-742-1	NZ_KK736542.1	+	4150583	4150635	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-743-1	NZ_KK736552.1	+	132495	132547	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-309-1	NZ_KK736297.1	+	87560	87612	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-745-1	NZ_KK736578.1	+	88541	88593	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-388-1	NZ_KK736473.1	+	2466433	2466485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-320-1	NZ_KK736404.1	+	81196	81248	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-312-1	NZ_KK736313.1	+	194713	194765	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-317-1	NZ_KK736365.1	+	88105	88157	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1170-1	NZ_GL871851.1	+	43112	43164	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-911-1	NZ_GL878028.1	+	724541	724593	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1180-1	NZ_GL883798.1	+	86450	86502	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1176-1	NZ_GL872255.1	-	40223	40171	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1178-1	NZ_GL884468.1	+	87820	87872	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1110-1	NZ_GL871816.1	+	87804	87856	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1653-1	NZ_GL883924.1	+	84931	84983	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1104-1	NZ_GL871751.1	-	651	599	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2032-1	NZ_GL872210.1	+	93460	93512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2004-1	NZ_GL884294.1	+	87814	87866	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1764-1	NZ_GL989523.1	+	84226	84278	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2002-1	NZ_GL884232.1	+	83146	83198	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1106-1	NZ_GL871776.1	+	87176	87228	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1654-1	NZ_GL884138.1	+	94025	94077	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2003-1	NZ_GL884196.1	+	81379	81431	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2001-1	NZ_JH590773.1	-	42161	42109	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1177-1	NZ_JH590617.1	+	88767	88819	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1102-1	NZ_JH590524.1	+	92133	92185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-961-1	NZ_JH590664.1	-	9874	9822	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1656-1	NZ_JH659572.1	+	695309	695361	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2038-1	NZ_JH695848.1	+	91681	91733	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-76-1	NZ_JH660542.1	-	40026	39974	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-993-1	NZ_JH768572.1	+	1165956	1166008	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1179-1	NZ_JH768585.1	+	1121171	1121223	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-75-1	NZ_JH815282.1	+	114130	114182	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2022-1	NZ_JH954133.1	+	32834	32886	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-841-1	NZ_JH953850.1	+	85845	85897	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-952-1	NZ_JH954331.1	+	76681	76733	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1143-1	NZ_JH955422.1	+	91755	91807	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1705-1	NZ_JH965420.1	+	47331	47383	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-860-1	NZ_JH970602.1	+	81850	81902	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-852-1	NZ_JH954938.1	+	91698	91750	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-756-1	NZ_JH964479.1	+	22701	22753	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-766-1	NZ_JH968717.1	+	91759	91811	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-861-1	NZ_JH969598.1	+	81857	81909	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2041-1	NZ_JH954585.1	+	47568	47620	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-753-1	NZ_JH943432.1	+	46671	46723	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-855-1	NZ_JH958335.1	-	512	460	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1755-1	NZ_KB021584.1	+	87738	87790	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2163-1	NZ_HE962388.1	+	4198777	4198829	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1726-1	NZ_KB021620.1	+	85592	85644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1754-1	NZ_KB021513.1	+	85592	85644	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1757-1	NZ_KB021454.1	+	1171507	1171559	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1749-1	NZ_KB021497.1	+	1170984	1171036	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1748-1	NZ_KB021525.1	+	427364	427416	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1751-1	NZ_KB021544.1	+	85116	85168	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1567-1	NZ_KB732351.1	+	97932	97984	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1505-1	NZ_KB732415.1	+	113044	113096	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1522-1	NZ_KB732473.1	+	743128	743180	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1414-1	NZ_KB732238.1	+	1437519	1437571	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1436-1	NZ_KB731785.1	+	32367	32419	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1441-1	NZ_KB732177.1	+	84318	84370	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1476-1	NZ_KB732283.1	+	81703	81755	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1564-1	NZ_KB732326.1	+	87030	87082	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1577-1	NZ_KB732362.1	+	80466	80518	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1495-1	NZ_KB732396.1	+	195853	195905	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1510-1	NZ_KB732448.1	+	782725	782777	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1527-1	NZ_KB732498.1	+	193073	193125	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1554-1	NZ_KB732596.1	+	199313	199365	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1561-1	NZ_KB733385.1	+	2566546	2566598	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1479-1	NZ_KB732953.1	+	2179276	2179328	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1483-1	NZ_KB731709.1	+	32524	32576	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2106-1	NZ_KE702260.1	+	90983	91035	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2131-1	NZ_KE702466.1	-	52307	52255	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2104-1	NZ_KE702230.1	+	115511	115563	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2113-1	NZ_KE702352.1	+	89164	89216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1270-1	NZ_KE700660.1	+	403149	403201	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1336-1	NZ_KE699249.1	+	188168	188220	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2121-1	NZ_KE702395.1	+	1075165	1075217	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1199-1	NZ_KE699807.1	+	1128823	1128875	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1297-1	NZ_KE699028.1	+	79986	80038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1345-1	NZ_KE699321.1	+	4351742	4351794	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1243-1	NZ_KE700363.1	+	85160	85212	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1369-1	NZ_KE699618.1	+	84335	84387	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1280-1	NZ_KE700796.1	+	4000295	4000347	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1337-1	NZ_KE699258.1	+	743182	743234	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1220-1	NZ_KE700087.1	+	3167873	3167925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1234-1	NZ_KE700242.1	+	2622626	2622678	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1233-1	NZ_KE700237.1	+	1196136	1196188	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1253-1	NZ_KE700478.1	+	4545085	4545137	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1344-1	NZ_KE699313.1	+	97329	97381	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1249-1	NZ_KE700419.1	+	742045	742097	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1296-1	NZ_KE700922.1	-	41764	41712	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1197-1	NZ_KE699787.1	+	349152	349204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1221-1	NZ_KE700096.1	+	88104	88156	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1373-1	NZ_KE699643.1	+	3534137	3534189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1222-1	NZ_KE700100.1	+	4500805	4500857	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1291-1	NZ_KE700872.1	+	80483	80535	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1248-1	NZ_KE700414.1	+	199577	199629	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2094-1	NZ_KE702091.1	+	85614	85666	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1229-1	NZ_KE700205.1	+	1104705	1104757	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1321-1	NZ_KE699105.1	+	2180086	2180138	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1208-1	NZ_KE699939.1	+	88102	88154	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1202-1	NZ_KE699849.1	+	1590970	1591022	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1301-1	NZ_KE700974.1	+	245573	245625	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1269-1	NZ_KE700653.1	+	325873	325925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2061-1	NZ_KE701627.1	+	121771	121823	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1356-1	NZ_KE699409.1	+	204658	204710	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1210-1	NZ_KE699949.1	+	742245	742297	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1308-1	NZ_KE701068.1	+	83463	83515	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1266-1	NZ_KE700607.1	+	185536	185588	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1405-1	NZ_KE701348.1	+	85496	85548	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1260-1	NZ_KE700567.1	+	85985	86037	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2047-1	NZ_KE701430.1	+	85390	85442	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1227-1	NZ_KE700176.1	+	2293232	2293284	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1190-1	NZ_KE699700.1	+	467270	467322	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1371-1	NZ_KE699635.1	+	2173713	2173765	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1254-1	NZ_KE700490.1	+	2177479	2177531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1295-1	NZ_KE700916.1	+	86774	86826	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1300-1	NZ_KE700953.1	+	84308	84360	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1194-1	NZ_KE699743.1	+	181707	181759	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2055-1	NZ_KE701518.1	+	92772	92824	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1201-1	NZ_KE699839.1	+	87380	87432	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1370-1	NZ_KE699628.1	+	319058	319110	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2069-1	NZ_KE701708.1	+	227760	227812	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1397-1	NZ_KE701232.1	+	79950	80002	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1230-1	NZ_KE700212.1	+	80100	80152	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1231-1	NZ_KE700228.1	+	85258	85310	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1394-1	NZ_KE701414.1	+	192950	193002	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1232-1	NZ_KE700230.1	-	42749	42697	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2057-1	NZ_KE701560.1	-	44526	44474	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1237-1	NZ_KE700264.1	+	2639992	2640044	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1268-1	NZ_KE700644.1	+	80782	80834	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2068-1	NZ_KE701687.1	+	85680	85732	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1198-1	NZ_KE699798.1	+	1589000	1589052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2081-1	NZ_KE701872.1	+	85305	85357	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1278-1	NZ_KE700785.1	+	204693	204745	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1292-1	NZ_KE700883.1	+	117631	117683	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1283-1	NZ_KE700822.1	+	1471785	1471837	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1396-1	NZ_KE701181.1	+	281387	281439	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1242-1	NZ_KE700346.1	+	87380	87432	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1211-1	NZ_KE699962.1	+	179632	179684	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1216-1	NZ_KE700044.1	+	91616	91668	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1403-1	NZ_KE701325.1	+	81714	81766	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1271-1	NZ_KE700720.1	-	747529	747477	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2052-1	NZ_KE701490.1	+	743787	743839	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1273-1	NZ_KE700745.1	+	99117	99169	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1294-1	NZ_KE700903.1	+	748033	748085	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1313-1	NZ_KE701161.1	-	495077	495025	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1204-1	NZ_KE699870.1	+	21397	21449	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2082-1	NZ_KE701899.1	+	1059289	1059341	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1226-1	NZ_KE700140.1	+	194311	194363	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2071-1	NZ_KE701737.1	+	84955	85007	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1206-1	NZ_KE699898.1	+	84775	84827	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1212-1	NZ_KE699972.1	+	118706	118758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1406-1	NZ_KE701351.1	+	1610660	1610712	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1309-1	NZ_KE701070.1	+	739347	739399	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2093-1	NZ_KE702074.1	+	774010	774062	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1213-1	NZ_KE699994.1	+	85300	85352	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1311-1	NZ_KE701117.1	+	27360	27412	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1312-1	NZ_KE701119.1	+	91804	91856	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1393-1	NZ_KE701223.1	+	202372	202424	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2059-1	NZ_KE701583.1	+	199908	199960	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1267-1	NZ_KE700619.1	+	3121410	3121462	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1404-1	NZ_KE701335.1	+	318980	319032	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2150-1	NZ_KE702713.1	+	199335	199387	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2125-1	NZ_KE702411.1	+	1536533	1536585	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2048-1	NZ_KE701438.1	+	1586317	1586369	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1408-1	NZ_KE701207.1	+	121266	121318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1261-1	NZ_KE700575.1	+	83633	83685	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2065-1	NZ_KE701670.1	+	2925945	2925997	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1293-1	NZ_KE700892.1	+	1709668	1709720	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2067-1	NZ_KE701675.1	+	192386	192438	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2139-1	NZ_KE702536.1	+	29590	29642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2053-1	NZ_KE701494.1	+	3675398	3675450	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1400-1	NZ_KE701267.1	+	213951	214003	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1258-1	NZ_KE700536.1	+	1137068	1137120	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2084-1	NZ_KE701945.1	+	84267	84319	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2099-1	NZ_KE702161.1	+	85444	85496	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2085-1	NZ_KE701948.1	+	78493	78545	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1395-1	NZ_KE701420.1	+	88540	88592	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2143-1	NZ_KE702605.1	+	25421	25473	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2112-1	NZ_KE702337.1	+	88193	88245	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1240-1	NZ_KE700291.1	+	117994	118046	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2063-1	NZ_KE701654.1	+	185838	185890	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1246-1	NZ_KE700403.1	+	85286	85338	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2100-1	NZ_KE702175.1	+	80475	80527	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1289-1	NZ_KE700861.1	+	85906	85958	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2056-1	NZ_KE701523.1	+	2947159	2947211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1306-1	NZ_KE701027.1	+	85359	85411	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1402-1	NZ_KE701300.1	+	85206	85258	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2108-1	NZ_KE702265.1	+	93283	93335	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2151-1	NZ_KE702724.1	+	83451	83503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2095-1	NZ_KE702095.1	-	52165	52113	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1314-1	NZ_KE701170.1	+	196467	196519	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2092-1	NZ_KE702067.1	+	92478	92530	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2133-1	NZ_KE702487.1	+	95092	95144	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1401-1	NZ_KE701274.1	+	85390	85442	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2149-1	NZ_KE702705.1	+	78536	78588	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2078-1	NZ_KE701848.1	+	119686	119738	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2058-1	NZ_KE701578.1	+	196466	196518	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2135-1	NZ_KE702499.1	+	204063	204115	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2117-1	NZ_KE702369.1	+	199988	200040	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2137-1	NZ_KE702509.1	+	81443	81495	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1304-1	NZ_KE701008.1	+	741430	741482	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2049-1	NZ_KE701450.1	+	329620	329672	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1303-1	NZ_KE700987.1	+	4378097	4378149	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2070-1	NZ_KE701712.1	+	766321	766373	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1219-1	NZ_KE700086.1	+	83699	83751	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2080-1	NZ_KE701868.1	+	90346	90398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1409-1	NZ_KE701377.1	+	200139	200191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1287-1	NZ_KE700845.1	+	299546	299598	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2062-1	NZ_KE701633.1	+	192993	193045	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2083-1	NZ_KE701910.1	+	317539	317591	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2103-1	NZ_KE702202.1	+	81678	81730	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1195-1	NZ_KE699763.1	+	91882	91934	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2118-1	NZ_KE702382.1	+	82835	82887	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1251-1	NZ_KE700461.1	-	43511	43459	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1412-1	NZ_KE701406.1	+	1581102	1581154	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2142-1	NZ_KE702584.1	+	2386278	2386330	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1411-1	NZ_KE701395.1	+	3203329	3203381	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1244-1	NZ_KE700366.1	+	83391	83443	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2126-1	NZ_KE702423.1	+	86433	86485	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-2054-1	NZ_KE701500.1	+	32308	32360	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1282-1	NZ_KE700813.1	+	197775	197827	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2128-1	NZ_KE702432.1	+	79824	79876	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2096-1	NZ_KE702100.1	+	85155	85207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1259-1	NZ_KE700541.1	-	376622	376570	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2140-1	NZ_KE702556.1	+	204424	204476	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2088-1	NZ_KE701999.1	+	305573	305625	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2073-1	NZ_KE701764.1	+	85198	85250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1399-1	NZ_KE701264.1	+	90963	91015	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2115-1	NZ_KE702359.1	+	89025	89077	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2060-1	NZ_KE701597.1	+	798535	798587	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2152-1	NZ_KE702739.1	+	85432	85484	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1407-1	NZ_KE701357.1	+	3796106	3796158	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2051-1	NZ_KE701474.1	+	183061	183113	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2087-1	NZ_KE701982.1	+	191708	191760	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2097-1	NZ_KE702123.1	+	198791	198843	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2072-1	NZ_KE701745.1	+	90258	90310	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2111-1	NZ_KE702333.1	+	184802	184854	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2098-1	NZ_KE702128.1	+	81858	81910	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2110-1	NZ_KE702301.1	+	87657	87709	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2076-1	NZ_KE701799.1	+	85001	85053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2077-1	NZ_KE701803.1	+	85072	85124	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2091-1	NZ_KE702043.1	+	203223	203275	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2134-1	NZ_KE702490.1	+	4289533	4289585	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2086-1	NZ_KE701969.1	+	712304	712356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2120-1	NZ_KE702386.1	+	3870113	3870165	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2075-1	NZ_KE701784.1	+	94679	94731	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2079-1	NZ_KE701857.1	+	763071	763123	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2124-1	NZ_KE702407.1	+	2192167	2192219	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2127-1	NZ_KE702425.1	+	3699233	3699285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2146-1	NZ_KE702642.1	+	185296	185348	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2148-1	NZ_KE702686.1	+	818241	818293	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2144-1	NZ_KE702621.1	+	80610	80662	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2141-1	NZ_KE702572.1	+	83823	83875	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1275-1	NZ_KE747799.1	+	206535	206587	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2130-1	NZ_KE705271.1	+	3310513	3310565	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1374-1	NZ_KE705265.1	+	175598	175650	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-771-1	NZ_KI521938.1	+	26072	26124	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-874-1	NZ_KI522050.1	-	2343	2291	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1375-1	NZ_KE705252.1	+	1104995	1105047	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-883-1	NZ_KI522363.1	+	79390	79442	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-901-1	NZ_KI522509.1	+	32268	32320	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2107-1	NZ_KI530646.1	+	1159405	1159457	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-769-1	NZ_KI521734.1	-	41852	41800	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-894-1	NZ_KI533778.1	+	64774	64826	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1342-1	NZ_KI530595.1	-	145459	145407	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-881-1	NZ_KI522310.1	+	60402	60454	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-768-1	NZ_KI521711.1	-	2401	2349	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-903-1	NZ_KI535003.1	-	52232	52180	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1378-1	NZ_KI530619.1	+	85133	85185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-889-1	NZ_KI532955.1	+	79292	79344	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-880-1	NZ_KI531695.1	+	148651	148703	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-895-1	NZ_KI534085.1	+	64817	64869	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2119-1	NZ_KI530691.1	+	742265	742317	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2122-1	NZ_KI530639.1	+	84693	84745	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1016-1	NZ_KI535409.1	+	2483096	2483148	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2136-1	NZ_KI530662.1	+	1099626	1099678	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-875-1	NZ_KI530989.1	+	32307	32359	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2116-1	NZ_KI530626.1	+	87523	87575	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-882-1	NZ_KI531752.1	+	64690	64742	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-898-1	NZ_KI534543.1	+	28730	28782	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-946-1	NZ_KI535243.1	+	80068	80120	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-879-1	NZ_KI531489.1	-	44412	44360	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1423-1	NZ_KI5317211.1	+	1128617	1128669	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1613-1	NZ_KE137107.1	+	1403747	1403799	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1449-1	NZ_KE137273.1	+	87029	87081	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1489-1	NZ_KE137316.1	+	3244486	3244538	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1641-1	NZ_KE137153.1	-	88837	88785	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-900-1	NZ_KI534784.1	+	79620	79672	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1017-1	NZ_KI535398.1	+	309573	309625	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1555-1	NZ_KE136642.1	+	179829	179881	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1541-1	NZ_KE136951.1	+	2950291	2950343	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1544-1	NZ_KE136956.1	+	180294	180346	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1504-1	NZ_KE136876.1	+	2069968	2070020	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1514-1	NZ_KE136897.1	+	314032	314084	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-876-1	NZ_KI531098.1	-	44414	44362	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1579-1	NZ_KE136820.1	+	1390963	1391015	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1413-1	NZ_KE136565.1	+	183210	183262	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1562-1	NZ_KE136702.1	+	123684	123736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1521-1	NZ_KE136944.1	+	743534	743586	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1575-1	NZ_KE136772.1	+	84349	84401	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1503-1	NZ_KE136872.1	-	345466	345414	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1548-1	NZ_KE136980.1	+	750943	750995	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1417-1	NZ_KE137162.1	+	713495	713547	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1610-1	NZ_KE137068.1	+	1539326	1539378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1612-1	NZ_KE137074.1	+	222135	222187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1418-1	NZ_KE137186.1	+	26461	26513	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1443-1	NZ_KE137233.1	+	216568	216620	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2114-1	NZ_KI530681.1	+	1627520	1627572	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1018-1	NZ_KI535383.1	+	3646346	3646398	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1520-1	NZ_KE136683.1	+	92806	92858	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1574-1	NZ_KE136752.1	+	116804	116856	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1518-1	NZ_KE136939.1	+	827982	828034	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1457-1	NZ_KE136655.1	+	1741425	1741477	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1572-1	NZ_KE136745.1	-	62476	62424	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1517-1	NZ_KE136913.1	+	2263750	2263802	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1609-1	NZ_KE137053.1	+	1171162	1171214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1328-1	NZ_KI538668.1	+	125792	125844	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1616-1	NZ_KE137133.1	+	84349	84401	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1239-1	NZ_KI538738.1	+	93530	93582	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2066-1	NZ_KI538796.1	+	717176	717228	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1022-1	NZ_KI535541.1	+	768557	768609	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1368-1	NZ_KI538698.1	+	356734	356786	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1615-1	NZ_KE137109.1	+	1090822	1090874	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1223-1	NZ_KI538713.1	+	84208	84260	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1196-1	NZ_KI538815.1	+	3031145	3031197	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-896-1	NZ_KI534157.1	+	79484	79536	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-888-1	NZ_KI532739.1	-	42075	42023	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-892-1	NZ_KI533438.1	-	479	427	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-897-1	NZ_KI534353.1	-	44556	44504	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-945-1	NZ_KI535081.1	-	52219	52167	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-887-1	NZ_KI532548.1	+	64822	64874	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1365-1	NZ_KI669338.1	+	85482	85534	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-752-1	NZ_KI912161.1	+	85941	85993	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1315-1	NZ_KI669335.1	+	81184	81236	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2123-1	NZ_KI669372.1	+	3497209	3497261	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1262-1	NZ_KI669356.1	+	1449482	1449534	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-300-1	NZ_KI929682.1	+	4436190	4436242	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-329-1	NZ_KI929787.1	+	4431189	4431241	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-396-1	NZ_KI894099.1	+	18404	18456	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-301-1	NZ_KI929678.1	+	708660	708712	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-330-1	NZ_KI929782.1	+	4994418	4994470	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2034-1	NZ_AELB01000053.1	+	19626	19678	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1467-1	NZ_KB732280.1	+	715829	715881	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1532-1	NZ_KB732523.1	+	91133	91185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1543-1	NZ_KB733374.1	+	739997	740049	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1597-1	NZ_KB732717.1	+	126864	126916	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1608-1	NZ_KB732770.1	+	390084	390136	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1519-1	NZ_KB732206.1	+	87364	87416	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1435-1	NZ_KB732269.1	+	769148	769200	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1499-1	NZ_KB732407.1	+	185493	185545	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1506-1	NZ_KB732426.1	+	386694	386746	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1512-1	NZ_KB732454.1	+	2967821	2967873	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1525-1	NZ_KB732469.1	+	217122	217174	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1529-1	NZ_KB732511.1	+	2112749	2112801	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1534-1	NZ_KB732530.1	+	4480523	4480575	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1547-1	NZ_KB732561.1	+	81703	81755	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1591-1	NZ_KB732652.1	+	89385	89437	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1531-1	NZ_KB732305.1	+	92502	92554	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1583-1	NZ_KB732388.1	+	93133	93185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1507-1	NZ_KB732429.1	+	37417	37469	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1526-1	NZ_KB732489.1	+	247369	247421	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1535-1	NZ_KB732535.1	+	3871288	3871340	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1601-1	NZ_KB732723.1	+	80818	80870	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1565-1	NZ_KB732337.1	+	1098559	1098611	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1538-1	NZ_KB732546.1	+	210180	210232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1614-1	NZ_KB733402.1	+	81830	81882	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1426-1	NZ_KB732931.1	+	4693303	4693355	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1472-1	NZ_KB733424.1	+	88823	88875	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1462-1	NZ_KB733119.1	+	748025	748077	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1536-1	NZ_KB732539.1	+	203898	203950	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1629-1	NZ_KB732876.1	+	79585	79637	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1633-1	NZ_KB732995.1	+	192553	192605	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1587-1	NZ_KB733034.1	+	217425	217477	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1438-1	NZ_KB731947.1	+	64751	64803	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1551-1	NZ_KB732574.1	+	3169698	3169750	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1593-1	NZ_KB732678.1	+	80428	80480	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1607-1	NZ_KB732766.1	+	1078458	1078510	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1619-1	NZ_KB732824.1	+	86495	86547	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1630-1	NZ_KB732885.1	+	312298	312350	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1478-1	NZ_KB732934.1	+	1549529	1549581	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1485-1	NZ_KB732981.1	+	79252	79304	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1620-1	NZ_KB733059.1	+	89746	89798	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1515-1	NZ_KB733178.1	+	185235	185287	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1588-1	NZ_KB732644.1	+	117671	117723	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1623-1	NZ_KB732835.1	+	90079	90131	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1636-1	NZ_KB732900.1	+	81758	81810	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1621-1	NZ_KB733069.1	+	1528753	1528805	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1635-1	NZ_KB733085.1	+	90282	90334	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1474-1	NZ_KB733136.1	+	89188	89240	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1511-1	NZ_KB733148.1	+	201599	201651	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1557-1	NZ_KB732580.1	+	2122614	2122666	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1492-1	NZ_KB733163.1	+	215587	215639	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1624-1	NZ_KB732854.1	+	179054	179106	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1523-1	NZ_KB733190.1	+	84884	84936	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1600-1	NZ_KB732993.1	+	1144242	1144294	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1584-1	NZ_KB733366.1	+	85959	86011	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1431-1	NZ_KB732889.1	+	87725	87777	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1537-1	NZ_KB733209.1	+	1116317	1116369	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1430-1	NZ_KB733437.1	+	194575	194627	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1509-1	NZ_KB733164.1	+	4861972	4862024	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1530-1	NZ_KB733361.1	+	2206480	2206532	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1560-1	NZ_KB732614.1	+	95899	95951	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1622-1	NZ_KB732987.1	+	728728	728780	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1434-1	NZ_KB732923.1	+	4068090	4068142	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1590-1	NZ_KB733431.1	+	1094753	1094805	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1416-1	NZ_KB733078.1	+	2993520	2993572	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1546-1	NZ_KB733355.1	+	80038	80090	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1453-1	NZ_KB733095.1	+	123923	123975	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1513-1	NZ_KB733153.1	+	196949	197001	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1490-1	NZ_KB733443.1	+	729974	730026	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1501-1	NZ_KB733173.1	+	3320254	3320306	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1618-1	NZ_KB732816.1	+	95428	95480	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1516-1	NZ_KB733185.1	+	182340	182392	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1553-1	NZ_KB733021.1	+	88442	88494	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1528-1	NZ_KB733194.1	+	81745	81797	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1533-1	NZ_KB733226.1	+	97399	97451	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1540-1	NZ_KB733215.1	+	81328	81380	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1461-1	NZ_KB732947.1	+	1431844	1431896	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1488-1	NZ_KB732965.1	+	89272	89324	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1497-1	NZ_KB733007.1	+	87248	87300	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1452-1	NZ_KB733086.1	+	1415738	1415790	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1459-1	NZ_KB733104.1	+	118416	118468	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1502-1	NZ_KB733172.1	+	700985	701037	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1558-1	NZ_KB732598.1	+	181845	181897	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1524-1	NZ_KB733201.1	+	697684	697736	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1568-1	NZ_KB733016.1	+	701071	701123	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1585-1	NZ_KB733032.1	+	1465991	1466043	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Eco-1594-1	NZ_KB733040.1	+	738674	738726	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1604-1	NZ_KB733048.1	+	85198	85250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1539-1	NZ_KB733228.1	+	206290	206342	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1465-1	NZ_KB733135.1	+	2714412	2714464	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1481-1	NZ_KB733141.1	+	1453826	1453878	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1628-1	NZ_KB731625.1	+	65760	65812	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1559-1	NZ_KB732610.1	+	3217660	3217712	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1486-1	NZ_KB733000.1	+	4628049	4628101	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1596-1	NZ_KB732702.1	+	2093565	2093617	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1458-1	NZ_KB733090.1	+	345664	345716	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1582-1	NZ_KB733426.1	+	3687548	3687600	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1464-1	NZ_KB733128.1	+	185480	185532	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1419-1	NZ_KB733317.1	+	21535	21587	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1581-1	NZ_KB733011.1	+	86410	86462	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1996-1	NZ_KB822529.1	-	52192	52140	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1602-1	NZ_KE137015.1	+	1385265	1385317	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1580-1	NZ_KE136843.1	+	716940	716992	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1471-1	NZ_KE137290.1	+	178813	178865	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1573-1	NZ_KE136621.1	-	63621	63569	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1415-1	NZ_KE137155.1	+	114384	114436	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1605-1	NZ_KE137028.1	+	4278970	4279022	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1437-1	NZ_KE137222.1	+	1659902	1659954	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1451-1	NZ_KE137276.1	-	548492	548440	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1626-1	NZ_KB733418.1	+	88751	88803	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1545-1	NZ_KE136972.1	+	1439611	1439663	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1446-1	NZ_KE136600.1	+	2913667	2913719	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1549-1	NZ_KE136988.1	+	80699	80751	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1508-1	NZ_KE136675.1	+	2773214	2773266	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1632-1	NZ_KE137143.1	+	1102318	1102370	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1422-1	NZ_KE137205.1	+	191756	191808	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1447-1	NZ_KE137259.1	+	537843	537895	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-455-1	NZ_KE375261.1	-	41954	41902	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-454-1	NZ_KE375303.1	+	64690	64742	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-456-1	NZ_KE375225.1	-	44622	44570	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-453-1	NZ_KE375333.1	-	42079	42027	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-284-1	NZ_KE375526.1	-	44499	44447	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-49-1	NZ_KE375613.1	+	24839	24891	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1576-1	NZ_KE136794.1	+	89196	89248	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1487-1	NZ_KE137305.1	+	2743351	2743403	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1500-1	NZ_KE136847.1	+	123541	123593	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-452-1	NZ_KE375397.1	+	24841	24893	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1285-1	NZ_KE698801.1	+	2222813	2222865	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-285-1	NZ_KE375504.1	-	44622	44570	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1108-1	NZ_KE353061.1	-	469	417	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1333-1	NZ_KE699213.1	+	2261174	2261226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1350-1	NZ_KE699361.1	+	85199	85251	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1372-1	NZ_KE698882.1	+	3962636	3962688	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1346-1	NZ_KE699328.1	+	765355	765407	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1247-1	NZ_KE698925.1	+	741829	741881	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1332-1	NZ_KE698833.1	+	1212504	1212556	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1339-1	NZ_KE699290.1	+	203429	203481	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1351-1	NZ_KE699371.1	+	1139517	1139569	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1354-1	NZ_KE699399.1	-	46140	46088	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1355-1	NZ_KE698860.1	+	85312	85364	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1352-1	NZ_KE699379.1	+	3129427	3129479	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1349-1	NZ_KE698854.1	+	87029	87081	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1347-1	NZ_KE699336.1	-	2182479	2182531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1364-1	NZ_KE699566.1	-	582415	582363	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1330-1	NZ_KE699189.1	+	197919	197971	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1361-1	NZ_KE699534.1	+	78550	78602	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1316-1	NZ_KE699037.1	+	2979691	2979743	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1367-1	NZ_KE699590.1	+	2993670	2993722	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1358-1	NZ_KE699456.1	+	85185	85237	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1317-1	NZ_KE699041.1	+	92815	92867	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1376-1	NZ_KE699686.1	+	204988	205040	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1331-1	NZ_KE699194.1	+	85115	85167	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1326-1	NZ_KE699142.1	+	90612	90664	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1366-1	NZ_KE699581.1	+	1099205	1099257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1324-1	NZ_KE699129.1	+	204686	204738	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1353-1	NZ_KE699395.1	+	745950	746002	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1255-1	NZ_KE698942.1	+	83897	83949	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1360-1	NZ_KE699480.1	+	298169	298221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1377-1	NZ_KE699698.1	+	203590	203642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1205-1	NZ_KE699895.1	+	84426	84478	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1318-1	NZ_KE699079.1	+	24904	24956	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1320-1	NZ_KE699099.1	+	1146447	1146499	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1307-1	NZ_KE699031.1	+	181978	182030	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1189-1	NZ_KE698890.1	+	88102	88154	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1319-1	NZ_KE699094.1	+	85356	85408	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1264-1	NZ_KE698975.1	+	86763	86815	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1217-1	NZ_KE698897.1	+	125488	125540	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1250-1	NZ_KE700457.1	+	935564	935616	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1334-1	NZ_KE699236.1	+	329829	329881	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1245-1	NZ_KE700389.1	+	1530219	1530271	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1329-1	NZ_KE699173.1	+	769817	769869	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1228-1	NZ_KE700182.1	+	196885	196937	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1225-1	NZ_KE700123.1	+	78535	78587	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1286-1	NZ_KE699009.1	+	201650	201702	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1238-1	NZ_KE700271.1	+	121843	121895	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1343-1	NZ_KE699306.1	+	1570515	1570567	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1257-1	NZ_KE700520.1	+	318247	318299	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1203-1	NZ_KE699873.1	+	35069	35121	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1338-1	NZ_KE699267.1	+	3281857	3281909	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1279-1	NZ_KE700788.1	+	1208073	1208125	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1192-1	NZ_KE699721.1	+	84995	85047	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1252-1	NZ_KE700471.1	+	728585	728637	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1236-1	NZ_KE700249.1	-	53043	52991	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1200-1	NZ_KE699826.1	+	194261	194313	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1218-1	NZ_KE700049.1	+	122728	122780	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1241-1	NZ_KE700299.1	+	53857	53909	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2105-1	NZ_KE702238.1	+	772837	772889	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2102-1	NZ_KE702186.1	+	83352	83404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2101-1	NZ_KE702179.1	+	486494	486546	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-848-1	NC_008253.1	+	4326358	4326410	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sfl-25-12	NZ.LAJS01000047.1	+	24423	24475	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-25-13	NZ.LAJU01000056.1	+	24788	24840	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sso-1-545	NZ.LAJT01000097.1	+	39222	39274	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-64-1	NZ.LAJW01000048.1	+	34707	34759	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-64-2	NZ.LAJP01000066.1	+	34638	34690	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-51-2	NZ.LAJV01000117.1	-	31124	31072	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1991-1	NZ.AFDR01000029.1	+	123981	124033	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1126-1	NZ.JH945811.1	+	47754	47806	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1470-1	NZ.KB733130.1	+	2157129	2157181	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-286-1	NZ.KE375480.1	-	44497	44445	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1450-1	NZ.ANXZ01000039.1	+	77024	77076	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1625-1	NZ.ANYT01000117.1	+	64751	64803	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1827-1	NZ.CAPL01000021.1	-	39907	39855	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1721-1	NZ.AMVR01000013.1	+	85592	85644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1421-1	NZ.ANXN01000074.1	+	78602	78654	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1469-1	NZ.ANYG01000054.1	+	32597	32649	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1428-1	NZ.ANXQ01000047.1	+	79108	79160	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1765-1	NZ.CAPK01000190.1	-	39191	39139	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1420-1	NZ.ANXM01000069.1	+	64751	64803	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1456-1	NZ.ANYC01000070.1	+	41451	41503	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1484-1	NZ.ANYM01000060.1	+	77056	77108	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1640-1	NZ.ANYZ01000053.1	+	65240	65292	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1634-1	NZ.ANYW01000072.1	+	18519	18571	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1473-1	NZ.ANYH01000078.1	+	66273	66325	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1482-1	NZ.ANYK01000069.1	+	85888	85940	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-463-4	NZ.CAPM01000059.1	-	52489	52437	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-857-1	NZ.AOEP01000134.1	+	94220	94272	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1454-1	NZ.ANYA01000061.1	+	32592	32644	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1427-1	NZ.ANXP01000124.1	+	34000	34052	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1638-1	NZ.ANYY01000082.1	+	65676	65728	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-751-1	NZ.HG738867.1	-	2653144	2653092	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-402-1	NZ.CP009578.1	+	4817517	4817569	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-399-1	NZ.CP009644.1	+	4098610	4098662	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-62-1	NC.004741.1	-	3631186	3631134	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1029-1	NC.004431.1	+	4646648	4646700	RNA → ←-hypo
Eco-2185-1	NC.007779.1	-	3509727	3509675	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1715-1	NC.013353.1	-	4722457	4722405	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1766-1	NC.013364.1	+	4809048	4809100	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-959-1	NC.012967.1	+	4106437	4106489	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-954-1	NC.010468.1	-	4508346	4508294	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbo-15-1	NC.010658.1	+	4123060	4123112	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1379-1	NC.011741.1	+	4208059	4208111	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1812-1	NC.013361.1	-	4648170	4648118	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-2182-1	NC.010473.1	+	4224674	4224726	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1145-1	NC.011745.1	+	4578369	4578421	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-853-1	NC.011748.1	+	4508708	4508760	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1187-1	NC.009800.1	+	4154963	4155015	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1780-1	NC.011601.1	+	4442040	4442092	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1735-1	NZ.JH378015.1	+	84387	84439	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1824-1	NC.013941.1	+	4816088	4816140	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1743-1	NZ.JH378081.1	+	329552	329604	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1719-1	NZ.JH378073.1	+	1107751	1107803	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Eco-1739-1	NZ_JH377982.1	+	84391	84443	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-472-2	NZ_JH378089.1	+	1162708	1162760	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1720-1	NZ_JH378068.1	+	84396	84448	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1736-1	NZ_JH378006.1	+	84397	84449	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1737-1	NZ_JH377999.1	+	88840	88892	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1828-1	NC_017646.1	+	4694260	4694312	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1733-1	NZ_JH378032.1	+	183333	183385	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1738-1	NZ_JH377991.1	+	1168004	1168056	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1731-1	NZ_JH378054.1	+	775608	775660	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1732-1	NZ_JH378041.1	+	181741	181793	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1734-1	NZ_JH378023.1	+	1163099	1163151	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1101-2	NC_017638.1	+	4106059	4106111	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-2183-1	NC_020518.1	+	3556167	3556219	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1651-1	NC_011993.1	+	4191555	4191607	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1753-1	NZ_KB021597.1	+	86049	86101	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-551-1	NZ_CP006027.1	+	4927607	4927659	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-572-1	NZ_CP007592.1	+	4700635	4700687	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-52-1	NZ_CP009166.1	+	4408327	4408379	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-398-1	NZ_CP010344.1	+	4283291	4283343	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-552-1	NZ_CP006262.1	+	4745473	4745525	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-549-1	NZ_CP007136.1	+	4927604	4927656	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-550-1	NZ_CP007133.1	+	4745477	4745529	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-463-1	NZ_CP007799.1	+	4549787	4549839	RNA → hypo → hypo → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-463-2	NZ_CP007799.1	+	4552090	4552142	RNA → hypo → hypo → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-463-3	NZ_CP007799.1	+	4554393	4554445	RNA → hypo → hypo → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-423-1	NZ_CP008801.1	+	4203810	4203862	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-57-1	NZ_CP004056.1	+	4130700	4130752	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-82-1	NZ_CP004057.1	+	4155779	4155831	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-291-1	NZ_CP009072.1	-	587468	587416	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-328-1	NZ_CP009273.1	+	4116882	4116934	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-893-1	NZ_KI533530.1	+	25625	25677	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1693-1	NZ_GG774009.1	+	32525	32577	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-878-1	NZ_KI531365.1	+	79602	79654	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-885-1	NZ_KI532294.1	+	32305	32357	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-890-1	NZ_KI533169.1	+	22217	22269	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1688-1	NZ_GG773540.1	-	52256	52204	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-770-1	NZ_KI530777.1	+	119139	119191	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-886-1	NZ_KI532500.1	-	52076	52024	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-891-1	NZ_KI533323.1	+	82900	82952	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1149-1	NC_017633.1	+	4549461	4549513	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-877-1	NZ_KI531308.1	+	126494	126546	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-884-1	NZ_KI532131.1	-	549	497	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1681-1	NZ_GG773415.1	-	39384	39332	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1-4	NZ_LK931544.1	-	47804	47752	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sfl-1-2	NZ_LM651928.1	+	4058590	4058642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1-1	NZ_LK985426.1	+	27751	27803	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-746-1	NZ_CP011134.1	+	4469729	4469781	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-682-1	NZ_HG941718.1	+	4499005	4499057	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-419-1	NZ_LN832404.1	+	4123427	4123479	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-472-1	NZ_CP011331.1	-	4330723	4330671	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sso-1-547	NZ_CP011422.1	+	966341	966393	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1-2	NZ_LK999974.1	-	48085	48033	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1-3	NZ_LK999940.1	-	49482	49430	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1169-1	NZ_CP011343.1	+	365674	365726	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1169-2	NZ_CP011342.1	-	2842199	2842147	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-72-1	NZ_CP007037.1	+	4126943	4126995	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sbo-2-10	NZ_CP011511.1	+	4030216	4030268	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-735-1	NZ_CP006636.1	+	4090689	4090741	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-734-1	NZ_CP006632.1	+	4399932	4399984	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-288-1	NZ_CP007442.1	+	4329255	4329307	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1760-1	NZ_GL988050.1	+	4993697	4993749	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1648-1	NZ_JH650819.1	+	699275	699327	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1763-1	NZ_JH648168.1	+	1166678	1166730	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1650-1	NZ_KB000001.1	+	2277793	2277845	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1762-1	NZ_JH648165.1	+	4457835	4457887	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-1-1	NZ_KL503838.1	-	31116	31064	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1981-1	NZ_AOGN01000115.1	+	13965	14017	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1714-1	NZ_AOGM01000086.1	+	28059	28111	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1744-1	NZ_AHAV01000106.1	+	32410	32462	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1834-1	NZ_AHAX01000061.1	+	86405	86457	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1745-1	NZ_AHAU01000082.1	+	84181	84233	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1389-1	NZ_AQFA01000051.1	+	88710	88762	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1388-1	NZ_AQFB01000026.1	+	46854	46906	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-774-1	NZ_AQGI01000087.1	+	88674	88726	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1093-1	NZ_AIGH01000071.1	+	97778	97830	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1183-1	NZ_APNY01000014.1	+	87903	87955	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Sfl-25-14	NZ_LAJQ01000116.1	-	31124	31072	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1181-1	NZ_APNW01000010.1	+	91909	91961	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-2010-2	NZ_AOQV01000032.1	-	52231	52179	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1042-1	NZ_LAIHE01000043.1	+	47119	47171	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-784-1	NZ_AFAB02000228.1	+	211717	211769	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-368-1	NZ_AIBM01000066.1	-	39338	39286	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1675-1	NZ_AQEV01000020.1	+	89153	89205	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-790-1	NZ_AQFF01000029.1	+	24026	24078	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-2043-1	NZ_AQEJ01000024.1	+	119619	119671	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1004-1	NZ_AQFK01000021.1	+	91846	91898	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1660-1	NZ_AQFY01000025.1	+	21685	21737	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1009-1	NZ_AQFI01000025.1	+	90459	90511	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1915-1	NZ_AQEM01000049.1	+	91353	91405	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1674-1	NZ_AQEW01000025.1	+	121217	121269	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1677-1	NZ_AQEU01000023.1	+	86825	86877	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-789-1	NZ_AQFG01000030.1	+	117781	117833	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1930-1	NZ_AQEL01000014.1	+	89670	89722	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1900-1	NZ_AQEN01000035.1	+	90256	90308	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1150-1	NZ_AQFD01000047.1	+	91814	91866	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1872-1	NZ_AQEQ01000029.1	+	121013	121065	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1661-1	NZ_AQEX01000030.1	+	90110	90162	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-2165-1	NZ_AQEK01000042.1	+	27965	28017	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1837-1	NZ_APXR01000184.1	+	23817	23869	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-786-1	NZ_AQFH01000031.1	+	29182	29234	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-822-1	NZ_APXI01000107.1	+	87655	87707	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Eco-1151-1	NZ_AQFC01000057.1	+	92055	92107	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Eco-1013-1	NZ_APXO01000114.1	+	30089	30141	RNA → ←-hypō
Eco-1850-1	NZ_AQES01000017.1	+	91820	91872	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-367-1	NZ_AIBL01000107.1	-	690	638	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-335-1	NZ_AIAG01000120.1	+	841	893	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-352-1	NZ_AIAX01000027.1	+	85782	85834	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-364-1	NZ_AIBJ01000226.1	+	53110	53162	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-331-1	NZ_AIAC01000054.1	+	88135	88187	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-374-1	NZ_AIBT01000104.1	-	486	434	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-427-1	NZ_AYOG01000027.1	+	72663	72715	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sdy-10-1	NZ_AXUU01000203.1	-	464	412	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Sdy-9-1	NZ_AXUT01000390.1	+	8180	8232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-426-1	NZ_AYOF01000027.1	+	72663	72715	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-955-1	NZ_AYOF01000070.1	-	556	504	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-415-1	NZ_CBWA010000372.1	+	4180	4232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-674-1	NZ_JHJE01000048.1	-	42020	41968	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-563-1	NZ_JHFO01000028.1	+	113553	113605	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-34-1	NZ_JJLL01000159.1	+	83742	83794	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-801-1	NZ_AQEA01000073.1	+	18586	18638	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-802-1	NZ_AQDZ01000090.1	+	18323	18375	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-823-1	NZ_AQDJ01000065.1	+	87862	87914	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-812-1	NZ_AQDQ01000090.1	+	32876	32928	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-807-1	NZ_AQDU01000131.1	+	66030	66082	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-1890-1	NZ_AQEO01000037.1	+	87406	87458	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-808-1	NZ_AQDT01000070.1	+	18684	18736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-1885-1	NZ_AQAC01000120.1	+	87618	87670	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-799-1	NZ_AQGH01000063.1	+	119118	119170	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-1884-1	NZ_AQAB01000058.1	+	87798	87850	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-791-1	NZ_AQEE01000140.1	+	11616	11668	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-1865-1	NZ_APYM01000235.1	+	33620	33672	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-811-1	NZ_AQGG01000114.1	+	46224	46276	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-1866-1	NZ_AQYN01000077.1	+	41465	41517	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-778-1	NZ_APZJ01000082.1	+	31396	31448	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-1871-1	NZ_APYS01000184.1	+	87770	87822	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-797-1	NZ_AQEB01000177.1	+	82811	82863	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-1892-1	NZ_APZA01000064.1	+	84354	84406	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-818-1	NZ_AQDL01000080.1	+	18684	18736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-1898-1	NZ_APZG01000363.1	+	80717	80769	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-803-1	NZ_AQDY01000177.1	+	74715	74767	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-33-1	NZ_JJLO01000155.1	+	60700	60752	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-30-1	NZ_JJLW01000160.1	+	84245	84297	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-704-1	NZ_JHLV01000044.1	-	835	783	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-542-1	NZ_JHHB01000007.1	-	605	553	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-509-1	NZ_JHNQ01000014.1	+	28051	28103	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-122-1	NZ_JNQU01000023.1	-	46318	46266	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-174-1	NZ_JNMN01000019.1	+	85263	85315	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-29-1	NZ_JNQC01000014.1	+	85569	85621	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-120-1	NZ_JNQS01000019.1	-	29219	29167	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-68-1	NZ_JNNA01000147.1	+	11560	11612	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-545-1	NZ_JASU01000001.1	-	1459090	1459038	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-28-1	NZ_JNQB01000014.1	-	43513	43461	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-566-1	NZ_JASR01000001.1	-	2462015	2461963	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
Eco-226-1	NZ_JOQV01000010.1	+	124927	124979	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

Eco-224-1	NZ_JOQY01000010.1	-	43045	42993	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-234-1	NZ_JORL01000069.1	+	93206	93258	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-153-1	NZ_JONB01000076.1	+	87678	87730	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-42-1	NZ_JOSH01000256.1	+	86293	86345	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1902-1	NZ_AQAH01000120.1	+	46756	46808	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-809-1	NZ_AQDS01000152.1	+	89137	89189	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-805-1	NZ_AQDW01000073.1	+	18711	18763	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1903-1	NZ_AQAI01000051.1	+	46814	46866	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-796-1	NZ_APXE01000196.1	+	29919	29971	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1905-1	NZ_AQAK01000105.1	+	46790	46842	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1911-1	NZ_AQAC01000051.1	+	46776	46828	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-781-1	NZ_APXQ01000307.1	+	18755	18807	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-824-1	NZ_APXJ01000122.1	+	18695	18747	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1891-1	NZ_APYZ01000056.1	+	84492	84544	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-792-1	NZ_AQFE01000042.1	+	88874	88926	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1814-1	NZ_AMXO01000238.1	-	638	586	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1894-1	NZ_APZC01000326.1	+	84351	84403	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-798-1	NZ_APZK01000191.1	+	23771	23823	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1779-1	NZ_AHAW01000062.1	+	86201	86253	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1877-1	NZ_APYV01000111.1	+	117684	117736	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-775-1	NZ_APWY01000309.1	+	14050	14102	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-785-1	NZ_AFAD02000007.1	+	29056	29108	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1867-1	NZ_APYO01000081.1	+	87500	87552	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1662-1	NZ_AQCW01000153.1	+	7794	7846	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-828-1	NZ_AQDF01000073.1	+	87908	87960	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1658-1	NZ_AQEZ01000029.1	+	87870	87922	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1873-1	NZ_APYT01000068.1	+	52672	52724	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1874-1	NZ_APZT01000083.1	+	30333	30385	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1849-1	NZ_APYB01000069.1	+	12751	12803	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-782-1	NZ_AQEG01000132.1	+	46739	46791	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1881-1	NZ_APZV01000166.1	+	33953	34005	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1841-1	NZ_APXV01000269.1	+	23763	23815	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1899-1	NZ_APZH01000117.1	+	84317	84369	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-773-1	NZ_AQEI01000288.1	+	2100	2152	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1092-1	NZ_AIGG01000081.1	+	93774	93826	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1904-1	NZ_AQAJ01000054.1	+	46831	46883	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-825-1	NZ_AQDI01000113.1	+	87539	87591	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1666-1	NZ_AQCS01000124.1	+	7818	7870	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1906-1	NZ_AQAL01000124.1	+	46820	46872	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1671-1	NZ_AQCN01000186.1	+	47879	47931	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-815-1	NZ_AQDN01000103.1	+	119323	119375	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1912-1	NZ_AQAR01000135.1	+	46818	46870	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1851-1	NZ_APYC01000065.1	+	78035	78087	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-820-1	NZ_AQDK01000143.1	+	7833	7885	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1920-1	NZ_AQAX01000145.1	+	87587	87639	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1859-1	NZ_APZR01000088.1	+	84547	84599	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1875-1	NZ_APZU01000076.1	+	30357	30409	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-814-1	NZ_AQDO01000114.1	+	87792	87844	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1820-1	NZ_AKBC01000335.1	-	584	532	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1883-1	NZ_AQEP01000022.1	+	90682	90734	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-810-1	NZ_AQDR01000106.1	+	122355	122407	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1886-1	NZ_AQAD01000068.1	+	87873	87925	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1098-1	NZ_AIGM01000052.1	-	51199	51147	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1868-1	NZ_APYP01000074.1	+	87717	87769	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-804-1	NZ_AQDX01000116.1	+	82883	82935	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1664-1	NZ_AQCU01000277.1	+	7814	7866	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1869-1	NZ_APYQ01000075.1	+	23398	23450	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1672-1	NZ_AQCM01000086.1	+	85975	86027	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-783-1	NZ_AQEF01000111.1	+	46744	46796	RNA → ←-hypo
Eco-1887-1	NZ_APZW01000065.1	+	87850	87902	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1676-1	NZ_APXP01000199.1	+	89949	90001	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1896-1	NZ_APZE01000057.1	+	84083	84135	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-793-1	NZ_AQED01000166.1	+	32326	32378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1836-1	NZ_APXQ01000157.1	+	23781	23833	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1889-1	NZ_AQAF01000060.1	+	87791	87843	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-800-1	NZ_APXF01000193.1	+	29965	30017	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1854-1	NZ_APYF01000071.1	+	78099	78151	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1908-1	NZ_AQAN01000124.1	+	46749	46801	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-795-1	NZ_APXD01000154.1	+	28153	28205	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1844-1	NZ_APXW01000179.1	+	23741	23793	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1913-1	NZ_AQAS01000085.1	+	46815	46867	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1847-1	NZ_APXZ01000347.1	+	23890	23942	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1921-1	NZ_AQAY01000065.1	+	87679	87731	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-777-1	NZ_APXA01000319.1	+	44177	44229	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1659-1	NZ_APZN01000151.1	+	20924	20976	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1922-1	NZ_AQAZ01000159.1	+	75652	75704	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1838-1	NZ_APXS01000116.1	+	23729	23781	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1893-1	NZ_APZB01000101.1	+	84367	84419	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1667-1	NZ_AQCR01000138.1	+	7883	7935	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1773-1	NZ_AJVU01000157.1	-	430	378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-462-1	NZ_ASRI01000044.1	-	39367	39315	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-408-1	NZ_JPKI01000004.1	-	820306	820254	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1876-1	NZ_APYU01000063.1	+	117681	117733	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-819-1	NZ_APXG01000161.1	+	18777	18829	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1852-1	NZ_APYD01000069.1	+	88151	88203	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1895-1	NZ_APZD01000070.1	+	80732	80784	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1860-1	NZ_APZS01000115.1	+	84337	84389	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-817-1	NZ_APZL01000142.1	+	46914	46966	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1882-1	NZ_AQAA01000396.1	+	47121	47173	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-827-1	NZ_AQDG01000067.1	+	87789	87841	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1772-1	NZ_AMXQ01000200.1	+	58855	58907	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1888-1	NZ_AQAE01000110.1	+	75775	75827	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-826-1	NZ_AQDH01000122.1	+	87807	87859	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1385-1	NZ_ALIN02000018.1	-	54267	54215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-813-1	NZ_AQDP01000060.1	+	87872	87924	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1914-1	NZ_APZX01000452.1	+	87677	87729	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1673-1	NZ_AQCL01000237.1	+	86159	86211	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-816-1	NZ_AQDM01000074.1	+	87795	87847	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1897-1	NZ_APZF01000116.1	+	84315	84367	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1855-1	NZ_APYG01000106.1	+	78045	78097	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1901-1	NZ_AQAG01000128.1	+	46798	46850	RNA → ←-hypo
Eco-829-1	NZ_AQDE01000110.1	+	34384	34436	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1842-1	NZ_APZO01000122.1	+	23706	23758	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-806-1	NZ_AQDV01000047.1	+	87714	87766	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Eco-1858-1	NZ_APZQ01000074.1	+	84729	84781	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1910-1	NZ_AQAP01000479.1	+	46858	46910	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1845-1	NZ_APXX01000117.1	+	23667	23719	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1909-1	NZ_AQAO01000051.1	+	46817	46869	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-780-1	NZ_AQEH01000121.1	+	88400	88452	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1909-2	NZ_AQAO01000113.1	-	589	537	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1916-1	NZ_AQAT01000072.1	+	87698	87750	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-794-1	NZ_AQEC01000081.1	+	18602	18654	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1846-1	NZ_APXY01000411.1	+	23795	23847	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1917-1	NZ_AQAU01000164.1	+	87687	87739	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1839-1	NZ_APXT01000186.1	+	18324	18376	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-779-1	NZ_APXB01000350.1	+	58819	58871	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1663-1	NZ_AQCV01000086.1	+	7832	7884	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1880-1	NZ_APYY01000581.1	+	14000	14052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1668-1	NZ_AQCQ01000084.1	+	7879	7931	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-821-1	NZ_APXH01000145.1	+	23860	23912	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1864-1	NZ_APYL01000074.1	+	87767	87819	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1853-1	NZ_APYE01000072.1	+	78009	78061	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1815-1	NZ_AKAZ01000268.1	-	584	532	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1095-1	NZ_AIGJ01000066.1	+	92486	92538	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1835-1	NZ_AQET01000058.1	+	61158	61210	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1059-1	NZ_AIEX01000073.1	+	23889	23941	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1856-1	NZ_APYH01000109.1	+	78061	78113	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1857-1	NZ_APYI01000070.1	+	34181	34233	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1840-1	NZ_APXU01000193.1	+	23762	23814	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1848-1	NZ_APYA01000065.1	+	87764	87816	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1665-1	NZ_AQCT01000137.1	+	7887	7939	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1669-1	NZ_AQCP01000088.1	+	7856	7908	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1670-1	NZ_AQCO01000090.1	+	7829	7881	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1078-1	NZ_AIFQ01000032.1	+	93309	93361	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1843-1	NZ_APZP01000199.1	+	23764	23816	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1863-1	NZ_APYK01000175.1	+	87879	87931	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-832-1	NZ_AQDB01000114.1	+	87811	87863	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1024-1	NZ_AQCX01000178.1	+	86186	86238	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1936-1	NZ_APZY01000103.1	+	34233	34285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-830-1	NZ_AQDD01000104.1	+	34455	34507	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1929-1	NZ_AQBG01000072.1	+	87685	87737	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1769-1	NZ_AJVS01000201.1	+	47721	47773	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1816-1	NZ_AJVX01000290.1	-	585	533	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1771-1	NZ_AKAY01000190.1	+	47720	47772	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1819-1	NZ_AJVV01000268.1	+	47709	47761	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1080-1	NZ_AIFS01000049.1	+	28249	28301	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1767-1	NZ_AMXP01000360.1	-	492	440	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1862-1	NZ_AQER01000021.1	+	90838	90890	RNA → ←-hypo
Eco-1861-1	NZ_APYJ01000184.1	+	87723	87775	RNA → ←-hypo
env-861	TrFG_contig04772	+	590	642	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cko-1-2	NZ_JTAV01000001.1	-	2039494	2039442	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cko-1-1	NZ_JUYC01000147.1	-	1421	1369	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cko-2-1	NC_009792.1	-	2839161	2839109	RNA → ←-hypo
Csp-14-1	NZ_DF830265.1	+	5041211	5041263	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-8-1	NZ_KQ089823.1	+	657952	658004	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-862	HBC_scaff_10316882	-	972	920	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-863	HBC.ctgs_1033478	-	972	920	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-864	JGI25152J39213_1000244	-	11208	11156	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → PRK14515 (PRK14515) →
env-865	JGI26052J44787_1048675	+	102	154	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-866	JGI26055J44792_1064428	+	109	161	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-59-1	NZ_AXOM01000028.1	+	73061	73113	RNA → ←hypo
Cam-2-1	NZ_CP011132.1	+	4667907	4667959	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-867	GoDraft_1000552	-	4465	4413	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cse-1-1	NZ_BBNB01000017.1	+	87854	87906	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-868	RicEn_C1233	-	705	653	RNA → ←PRK05264 (PRK05264)MetJ (COG3060)
Esp-43-1	NZ_JXAF01000019.1	-	42097	42045	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kor-1-1	NZ_JZLI01000016.1	-	25625	25573	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-72-1	NC_021500.1	+	3129679	3129731	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ksa-1-1	NZ_CP007215.1	-	2992737	2992685	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Mma-2-1	NZ_HE578950.1	+	83372	83424	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pur-1-1	NZ_CP011602.1	-	4453563	4453511	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cfa-1-1	NZ_BBMX01000021.1	+	105611	105663	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-869	GO4KUYH01D3UFU	+	163	215	RNA → ←hypo
env-870	JGI26054J46599_1125534	+	31	83	RNA → ←hypo
Kcf-1-1	NZ_BADH01000654.1	+	6305	6357	RNA → ←hypo
env-871	AECF.contig04828	-	82	30	RNA →
Esp-42-1	NZ_JXAG01000025.1	-	24558	24506	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Era-1-1	NZ_JH725435.1	-	117259	117207	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
Kra-1-1	NZ_JDYJ01000019.1	+	81305	81357	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kra-2-1	NZ_JSFC01000001.1	-	4090078	4090026	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-12-1	NZ_JAQB01000052.1	+	46953	47005	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cam-1-2	NZ_JMQQ01000019.1	+	108204	108256	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cam-1-3	NZ_CDQV01000565.1	-	351	299	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Csp-13-1	NZ_KK736183.1	+	1511889	1511941	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ecl-60-1	NC_014618.1	-	4692425	4692373	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-872	ACOFG988.contig03604	-	434	382	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-873	CLOF.contig01917	-	175	123	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-874	DPOLF_F46JATG01CXPZU	+	132	184	RNA → hypo →
env-875	TrFG_GO06Z1101D3LWN	-	296	244	RNA → ←hypo
Pvu-1-1	NZ_BBMZ01000025.1	+	73082	73133	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gpe-1-1	NZ_LFWC01000015.1	+	70062	70109	RNA → ←PriA (COG1198)PRK05580 (PRK05580)
Gxi-1-1	NZ_AMRI01000052.1	+	50253	50300	RNA → ←PriA (COG1198)PRK05580 (PRK05580)
env-876	CEPH01076795.1	-	934	882	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-877	CEUT01138684.1	+	360	412	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-878	CEUX01102889.1	+	2080	2132	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-879	CEVB01010953.1	+	2587	2639	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-880	3300000053_316318	-	326	276	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pme-1-1	NZ_LAVS01000089.1	-	2227	2177	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rsp-2-1	NZ_LAMX01000027.1	+	22231	22281	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-881	JCVL_SCAF_1096627203505	+	760	810	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Rsp-1-1	NZ_AFHIO1000019.1	+	59978	60028	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aag-1-1	NZ_AKKU01000026.1	+	135962	136016	rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aae-1-1	NZ_ALAB01000027.1	-	258817	258762	rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-882	3300000053_006648	+	1670	1725	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-883	3300000052_128519	-	369	314	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Aje-1-1	NZ_AH01000040.1	+	47811	47866	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Aik-1-1	NZ_LAHO01000004.1	+	191768	191818	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-884	CEWF01130100.1	-	390	340	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-885	CESO01326287.1	+	25250	25300	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Asp-9-1	NZ_LAHP01000005.1	+	145176	145226	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Rpe-1-1	NZ_KB907708.1	-	105042	104992	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Rba-1-1	NZ_AUDG01000008.1	+	95570	95622	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Rna-1-1	NZ_BAFK01000001.1	+	221629	221679	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-886	P_2C_Liq_3_UnCty_100070	+	17818	17869	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-887	P_2C_Liq_1_UnCty_1000092	+	12358	12409	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-888	P_2C_Liq_2_UnCty_1000391	-	4101	4050	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Asa-9-1	NZ_AUBH01000006.1	+	241719	241770	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Gli-1-1	NZ_BAEN01000076.1	-	267505	267455	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Gpu-1-1	NZ_BAET01000031.1	+	85003	85056	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-889	P_2C_Liq_1_UnCty_1151257	+	164	215	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Gsp-2-1	NZ_DS989813.1	-	29050	28999	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-890	JGI20152J14361_10002432	-	5019	4967	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-891	JGI20151J14362_10056971	+	509	561	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-892	JGI20153J14295_10036242	-	781	729	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-893	JGI20153J14318_10036242	-	781	729	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Gni-1-1	NC_016041.1	+	3221564	3221615	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Gpa-1-1	NZ_KE386814.1	-	95601	95549	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-894	_GX4VOVV01EZ7Q7	-	122	71	RNA → hypo →
Gpo-1-1	NZ_BAER01000045.1	+	100823	100873	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-895	JGI20157J14317_10084041	-	798	748	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Gar-1-1	NZ_BAEO01000065.1	-	149160	149110	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-896	JGI20153J14295_10040431	-	589	539	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-897	JGI20153J14318_10040431	-	589	539	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Gps-1-1	NC_020514.1	+	218373	218423	RNA → ← hypo
env-898	CEWJ01088929.1	-	6335	6285	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-899	CERD01001178.1	+	488	538	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-900	JGI12097J13213_1000038	-	8918	8868	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-901	CEUB01117245.1	+	201	251	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-902	CENJ01188181.1	+	311	361	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-903	CEQI01175305.1	-	182	132	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-904	CEQJ01016256.1	-	1813	1763	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-905	CEQQ01064592.1	+	268	318	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-906	CEQU01072249.1	+	4389	4439	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-907	CESF01168137.1	+	311	361	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-908	CESJ01134068.1	+	721	771	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-909	CESL01022392.1	+	8352	8402	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-910	CESM01050812.1	+	387	437	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-911	CESR01320609.1	-	725	675	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-912	CETH01013924.1	+	3079	3129	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-913	CETJ01046849.1	+	3068	3118	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-914	CETO01002955.1	+	1403	1453	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-915	CETQ01029354.1	-	3342	3292	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-916	CETS01286873.1	-	271	221	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-917	CETT01166069.1	+	280	330	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

env-918	CETZ01011127.1	-	189	139	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-919	CEUC01278456.1	-	212	162	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-920	CEUL01103588.1	-	129	79	RNA → rpmE (PRK00528)rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-921	CEUM01053021.1	-	9973	9923	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-922	CEUQ01106239.1	+	1010	1060	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-923	CEUU01007342.1	+	10738	10788	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-924	CEUW01253280.1	+	3470	3520	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-925	CEUX01014635.1	+	306	356	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-926	CEUY01025164.1	-	498	448	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-927	CEVF01153062.1	-	1235	1185	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-928	CEWF01048426.1	+	795	845	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-929	CEWI01078971.1	+	376	426	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-930	CEQS01114527.1	+	267	317	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-931	CERB01320821.1	-	434	384	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-932	CESW01183859.1	-	333	283	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-933	CENT01094743.1	-	7856	7806	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-934	CETX01054649.1	+	40	90	RNA → hypo → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pat-1-1	NC.008228.1	-	5045228	5045178	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gsp-1-1	NC.015497.1	-	4815194	4815144	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gme-1-1	NZ.BAEP01000006.1	+	5181	5231	RNA → ←-hypo
Gch-1-1	NZ.BAEM01000019.1	-	23453	23403	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-18-1	NZ.JRKG01000003.1	-	204430	204380	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Gag-1-1	NZ.BAEK01000035.1	-	25147	25097	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-935	CENT01097505.1	-	7154	7104	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asp-7-1	NZ.JQHG01000007.1	+	134541	134591	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asp-6-1	NZ.JQFW01000050.1	+	134541	134591	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-936	CEPZ01032191.1	-	667	617	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-937	CEPV01037448.1	+	598	648	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-938	CEQH01105122.1	+	558	608	RNA →
env-939	CERD01127562.1	-	11742	11692	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-940	CERQ01120834.1	+	1165	1215	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-941	CESC01037646.1	-	1488	1438	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-942	CESQ01222567.1	+	1419	1469	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-943	CETH01076277.1	-	632	582	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-944	CETO01078733.1	+	15481	15531	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-945	CETZ01121052.1	+	1200	1250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-946	CEUK01183503.1	+	5639	5689	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-947	CEUL01119818.1	+	637	687	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-948	CEUN01029593.1	+	2483	2533	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-949	CEUP01063689.1	+	379	429	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-950	CEUQ01293793.1	-	193	143	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-951	CEUS01268477.1	+	379	429	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-952	CEUY01052883.1	+	4169	4219	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-953	CEVA01307699.1	-	183	133	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sch-1-1	NZ.KB899393.1	-	40924	40874	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-954	CETX01177667.1	+	221	272	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-955	JGI12097J13213.1001517	-	1180	1129	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Asp-5-1	NZ.JFBK01000001.1	-	4465586	4465534	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-956	CESM01022288.1	+	175	227	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ama-14-1	NZ.JWLW01000010.1	+	95215	95267	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-957	JGI12120J13076.102920	-	400	348	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-958	JGI12020J13220.1000023	+	611	663	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-959	JGI11800J13271_1000309	+	1785	1837	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-960	CENO01130258.1	+	217	269	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-961	CENX01098222.1	+	441	493	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-962	CEOC01158531.1	+	359	411	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-963	CEPA01172521.1	-	2899	2847	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-964	CEPH01005174.1	-	133	81	RNA→
env-965	CEPK01169822.1	-	3662	3610	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-966	CEPU01151402.1	+	251	303	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-967	CEPV01200560.1	+	250	302	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-968	CEPW01224637.1	-	461	409	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-969	CEPY01054066.1	+	243	295	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-970	CERS01171998.1	+	621	673	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-971	CETB01056501.1	-	13247	13195	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-972	CETI01039859.1	-	2772	2720	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-973	CETR01033810.1	-	294	242	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-974	CEVK01195631.1	-	373	321	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-975	CEVM01241445.1	+	721	773	RNA→ ←-hypo
env-976	CEVQ01117480.1	+	28172	28224	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-977	CEVZ01044906.1	-	3231	3179	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-978	CEWI01013184.1	-	2889	2837	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-979	CEWJ01032880.1	+	1770	1822	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-980	Mariner_1003560	+	602	654	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-981	TahiMoana_1000279	+	110727	110779	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-982	CEQG01016892.1	-	90	38	RNA→
env-983	CEQH01004879.1	-	232	180	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-984	CEQM01102687.1	-	3030	2978	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-985	CESC01010137.1	-	90	38	RNA→
env-986	CERG01114847.1	+	251	303	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-987	CERR01251468.1	+	128	180	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-988	CERV01054361.1	-	2998	2946	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-989	CESI01008217.1	+	5871	5923	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-990	CETE01023379.1	+	39511	39563	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-991	CETQ01016815.1	+	345	397	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-992	JGI11881J13070_1018350	-	364	312	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-993	JGI12025J13092_100507	+	516	568	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-994	JGI12107J13081_100823	+	1838	1890	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-995	JGI11755J13075_102346	-	67	15	RNA→
env-996	JGI11765J13083_105572	+	198	250	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-997	JGI11805J13103_105660	+	220	272	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-998	JGI11754J13217_1010636	+	234	286	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-999	JGI12207J13218_1017989	+	147	199	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1000	JGI12218J13221_1001289	-	3331	3279	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1001	JGI11978J13257_1000948	-	2287	2235	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1002	JGI12148J13107_102525	+	1320	1372	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1003	JGI11949J13268_1023255	+	99	151	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1004	JGI11931J13222_1000347	+	5042	5094	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1005	JGI12156J13080_107206	+	180	232	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1006	CEOW01017245.1	-	1797	1745	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1007	CEPC01258783.1	-	681	629	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1008	CEPD01089067.1	+	250	302	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→
env-1009	CEPM01022322.1	-	136	84	RNA→
env-1010	CEQL01158694.1	+	267	319	RNA→ rpmE (PRK00019)Ribosomal_L31 (pfam01197)→

env-1011	CEQP01301609.1	-	558	506	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1012	CEQX01011574.1	+	291	343	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1013	CERL01235058.1	-	936	884	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1014	CESG01011657.1	+	212	264	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1015	CESR01104947.1	+	324	376	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1016	CESX01007994.1	-	514	462	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1017	CESZ01006041.1	-	1040	988	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1018	CETH01095267.1	-	295	243	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1019	CETM01005225.1	-	232	180	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1020	CETV01018356.1	-	1037	985	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1021	CEUC01310578.1	+	502	554	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1022	CEUK01103776.1	-	854	802	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1023	CEUS01001549.1	+	1749	1801	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1024	PRT_FXEMIOB02I0Y6Q	+	336	388	RNA →
Ama-2-1	NZ_JWLY01000014.1	+	124090	124142	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo →
Ama-2-2	NZ_JWLX01000009.1	+	137955	138007	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo →
Ama-2-3	NZ_JXRW01000067.1	+	4135	4187	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo →
Ama-6-1	NC_018679.1	+	4142089	4142141	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo →
Ama-3-1	NC_018632.1	+	4038733	4038785	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo →
Ama-9-1	NC_018678.1	+	4082894	4082946	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) → hypo → hypo → hypo →
env-1025	JGI12097J13213_1002839	+	279	331	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1026	CESQ01018836.1	-	3232	3180	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1027	CENU01132442.1	-	183	131	RNA →
env-1028	CESS01183283.1	-	394	342	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1029	CENY01193254.1	-	408	356	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1030	CEVI01152444.1	-	189	138	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1031	CENG01015084.1	-	330	278	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ama-7-1	NC_018692.1	+	3943384	3943436	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1032	CENH01017879.1	+	4473	4525	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1033	CENT01009082.1	+	1961	2013	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1034	CEOF01054473.1	+	162	214	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ama-4-1	NC_019393.1	+	4144827	4144879	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ama-8-1	NC_011138.3	+	4003832	4003884	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ama-12-1	NC_021714.1	+	3960995	3961047	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ama-11-1	NC_021712.1	+	3975520	3975572	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ama-5-1	NC_023045.1	+	3921718	3921770	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ama-13-1	NC_021713.1	+	4126897	4126949	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Ama-10-1	NC_021717.1	+	4004559	4004611	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1035	CEQI01061962.1	-	175	123	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1036	CEPQ01008655.1	-	175	123	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1037	CENH01008023.1	-	1725	1674	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1038	CEPO01000325.1	-	741	690	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1039	CEPX01405457.1	-	564	513	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1040	CEPY01060952.1	-	1146	1095	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1041	CEQF011170735.1	-	268	217	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1042	CEQG01249219.1	-	343	292	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1043	CEQH01275712.1	-	508	457	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1044	CEQI01021998.1	-	423	372	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1045	CEQQ01141891.1	+	1236	1287	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1046	CEQS01013898.1	+	914	965	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1047	CEQU01246787.1	-	692	641	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
env-1048	CEQW01065128.1	+	15681	15732	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

env-1049	CEQX01342402.1	+	853	904	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1050	CERB01035857.1	+	914	965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1051	CERC01009557.1	+	9311	9362	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1052	CERD01017474.1	-	551	500	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1053	CERE01022366.1	-	692	641	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1054	CERG01021368.1	+	2982	3033	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1055	CERL01022088.1	-	6990	6939	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1056	CERQ01243698.1	-	1660	1609	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1057	CERR01097688.1	-	14701	14650	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1058	CERS01310048.1	+	853	904	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1059	CERV01201358.1	-	463	412	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1060	CERX01037102.1	+	914	965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1061	CESC01002520.1	+	28189	28240	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1062	CESL01235759.1	+	660	711	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1063	CESM01253004.1	+	346	397	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-1064	CESQ01220634.1	+	374	425	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1065	CESQ01033314.1	-	39300	39249	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1066	CESR01169867.1	+	15683	15734	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1067	CESY01007781.1	-	786	735	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1068	CETG01034723.1	-	509	458	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1069	CETH01358830.1	+	328	379	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1070	CETJ01151418.1	+	432	483	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1071	CETM01434228.1	-	509	458	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1072	CETN01152556.1	+	995	1046	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1073	CETO01022433.1	+	15683	15734	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1074	CETR01195172.1	-	320	269	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1075	CETS01064668.1	+	666	717	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1076	CETV01229244.1	+	266	317	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1077	CETY01197886.1	+	15683	15734	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1078	CEUC01145376.1	-	2776	2725	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1079	CEUD01121151.1	+	15683	15734	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1080	CEUM01133227.1	-	1141	1090	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1081	CEUN01034438.1	-	509	458	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1082	CEUP01008540.1	+	914	965	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1083	CEUS01321896.1	-	272	221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1084	CEUY01032768.1	-	2465	2414	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1085	CEVA01041336.1	+	14542	14593	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1086	CEVG01310261.1	+	713	764	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1087	CEVI01003491.1	-	39966	39915	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1088	CEVK01179875.1	-	373	322	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1089	CEVZ01370195.1	-	341	290	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1090	CEWB01191093.1	+	853	904	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1091	CEWI01259732.1	+	1163	1214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1092	CEWJ01143993.1	+	15683	15734	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aau-2-1	NZ_CP008849.1	+	3814040	3814091	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Aau-2-2	NZ_CP010912.1	+	3941841	3941892	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pha-4-1	NZ_ATUO01000067.1	+	19196	19259	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1093	BS_KBA.SWE02.21m.10551754	+	152	216	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1094	KGLS1_ANT01_95m.c10012892	-	141	77	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1095	KGLS2_ANT05_2345m.c1007829	+	2549	2613	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1096	KGLS1_ANT01_95m.c10008728	-	288	224	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1097	KGLS2_ANT04_2345m.c1009121	-	1653	1589	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

env-1098	KGLS2_ANT05_2345m.c1003874	+	4157	4221	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pin-1-1	NC_008709.1	-	3538323	3538259	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1099	SA_S2_NOR13_50m.c1137819	+	116	180	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1100	SA_S1_NOR05_45m.c10035075	+	932	996	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1101	SA_S1_NOR08_45m.c10037975	-	506	442	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1102	SA_S2_NOR15_50m.c10183128	+	221	285	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1103	SA_S1_NOR05_45m.c10141124	-	371	307	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1104	ASRP01007864.1	-	203	139	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Par-2-1	NZ_AXWP01000041.1	-	63330	63266	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Paq-1-1	NZ_AUAM01000062.1	-	1573	1509	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pos-1-1	NZ_KB907022.1	+	11035	11099	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-35-1	NZ_CBRF010000116.1	-	14588	14523	rpmE (PRK00019)Ribosomal_L31 (pfam01197) → hypo →
env-1105	KGLS1_ANT01_95m.c10000182	-	2970	2905	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1106	KGLS2_ANT05_2345m.c1036643	-	656	591	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1107	KGLS1_ANT03_95m.c1000085	+	397	462	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1108	KGLS1_ANT02_95m.c10004749	-	2245	2180	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1109	KGLS2_ANT04_2345m.c1001133	+	149	214	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1110	SA_S1_NOR05_45m.c10067223	-	515	451	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1111	SA_S1_NOR08_45m.c10078152	-	527	463	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1112	SA_S2_NOR15_50m.c10042781	+	1628	1692	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Psp-34-1	NC_020802.1	-	2578482	2578419	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sam-1-1	NZ_KB899636.1	+	535889	535941	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
env-1113	CETY01166192.1	+	4690	4742	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pfl-3-1	NZ_JAEE01000006.1	-	27868	27808	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ykr-2-1	NZ_ACCA01000030.1	+	28292	28346	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pge-1-1	NZ_CP009450.1	+	982043	982094	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-281-1	NZ_KI535451.1	+	4373213	4373264	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vja-2-1	NZ_BAOC01000004.1	+	79462	79512	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-256-1	NZ_ARRZ01000059.1	+	70097	70148	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-70-1	NZ_JJNF01000020.1	+	68880	68931	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ksp-7-1	NZ_GL882802.1	-	7317	7266	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-244-1	NZ_KI535433.1	+	4551638	4551689	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-31-1	NZ_KK036716.1	+	4570872	4570923	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-143-1	NZ_KK036961.1	+	1586585	1586636	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-142-1	NZ_KK036965.1	+	4373208	4373259	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-206-6	NZ_CP009876.1	+	90246	90297	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-6-1	NZ_ABWW01000003.1	-	44774	44724	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-11-1	NC_014922.1	+	379270	379320	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eba-1-1	NZ_KN150796.1	+	4226043	4226094	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ysi-1-1	NZ_CP007230.1	+	1742261	1742314	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-1-3	NZ_CP007470.1	+	969362	969412	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-4-2	NZ_AKCF01000001.1	-	987481	987430	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-6-1	NZ_ARVT01000001.1	+	5597804	5597855	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-10-1	NZ_JAKY01000077.1	+	76452	76503	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-7-1	NZ_KK097713.1	+	287765	287816	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-13-1	NZ_JH603137.1	+	5368788	5368839	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-19-1	NZ_KI535631.1	+	608704	608755	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-20-1	NZ_KI535598.1	+	3002323	3002374	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-1-1	NZ_CP011618.1	-	3481846	3481795	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-1-2	NZ_CP011597.1	-	3460832	3460781	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-5-1	NZ_KQ235791.1	+	607562	607613	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Kox-4-1	NZ_KQ235784.1	-	5111984	5111933	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-3-1	NZ_KQ235774.1	-	2026518	2026467	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-16-1	NZ_AIEM01000124.1	+	33854	33905	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-13-1	NZ_ACSL01000001.1	-	4352	4302	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-1-4	NZ_CP007471.1	+	209664	209714	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-10-1	NZ_KE560346.1	+	418205	418257	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-11-1	NZ_KE560341.1	+	214674	214726	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sma-25-1	NZ_JH670250.1	+	3952174	3952226	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yru-2-2	NZ_ACCC01000012.1	-	37748	37695	rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yru-2-1	NZ_LKN150747.1	-	419490	419437	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yru-1-2	NZ_CP011078.1	-	2139842	2139789	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yru-1-3	NZ_JRWX01000001.1	+	89041	89094	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-11-1	NZ_CAOB01000008.1	-	6262	6213	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-8-1	NZ_CAOA01000077.1	+	57549	57598	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-10-1	NZ_CAOD01000077.1	+	4423	4472	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-6-1	NZ_CANW01000076.1	+	57549	57598	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-4-1	NZ_CANU01000076.1	-	6171	6122	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-5-1	NZ_CANV01000028.1	-	6171	6122	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-2-1	NZ_CANT01000080.1	+	44452	44501	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-3-1	NZ_AFWJ01000267.1	-	88872	88823	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-13-1	NZ_LK391965.1	+	1712210	1712259	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-1-1	NC_022528.1	-	3799901	3799852	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-14-1	NZ_LK391967.1	-	747727	747678	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-12-1	NZ_LK391963.1	-	4084011	4083962	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vni-7-1	NZ_LK054223.1	+	2036267	2036316	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yin-2-1	NZ_AALF02000041.1	-	35133	35079	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yin-1-1	NZ_CP009801.1	+	2155185	2155239	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-18-2	NC_017452.1	+	1536435	1536485	RNA → hypo → hypo → hypo → hypo → COG3306 (COG3306) → COG3306 (COG3306) →
Hin-14-1	NZ_AAZG01000004.1	+	103226	103276	heptsyl_trn_III (TIGR02201)RfaF (COG0859) →
Hin-4-1	NZ_AAZF01000001.1	-	45759	45709	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-3-1	NZ_CP008740.1	-	919236	919186	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vvu-10-1	NZ_CM001799.1	+	1209887	1209938	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vvu-3-1	NZ_JDSE01000046.1	+	2549	2600	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ywa-1-1	NZ_CBLI010000383.1	-	346	293	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ywa-1-2	NZ_CBLG010000169.1	+	14348	14401	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dso-4-1	NZ_CM001839.1	+	191962	192015	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dso-3-1	NZ_CM001859.1	+	192153	192206	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dso-5-1	NZ_CM001842.1	+	191961	192014	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dso-2-1	NZ_CM001860.1	+	192284	192337	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dso-6-1	NZ_KI866531.1	-	2542514	2542461	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Dsp-8-1	NZ_AMWE01000004.1	-	1998925	1998872	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yps-1-3	NZ_CP008943.1	-	2566211	2566158	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yps-1-4	NZ_CP009759.1	-	2277500	2277447	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yps-5-1	NZ_CAQW01000045.1	+	24851	24904	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yps-2-1	NZ_CAQT01000042.1	-	7087	7034	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yps-7-1	NZ_CAQY01000083.1	+	13728	13781	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yps-3-1	NZ_CAAQ01000109.1	-	7077	7024	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yps-4-1	NZ_CAAQV01000017.1	+	71002	71055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yps-6-1	NZ_CAAQX01000032.1	+	13731	13784	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sso-1-546	NZ_CXJA01000293.1	+	448	499	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yal-3-1	NZ_CP011975.1	-	2144109	2144055	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Sal-1-1	NZ.LN810019.1	+	59430	59481	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ssp-1-1	NZ.JADP01000004.1	+	57303	57354	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sha-2-1	NZ.BALL01000002.1	+	56991	57042	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Sal-2-1	NZ.BALO01000003.1	+	42263	42314	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-168-1	NZ.AZAP01000001.1	+	69358	69409	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-46-1	NZ.KK036936.1	-	673181	673130	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kpn-206-7	NZ.CP0111313.1	-	5158789	5158738	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vvu-9-1	NZ.AMQV01000002.1	-	49207	49156	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vvu-2-1	NZ.AMQR01000003.1	+	15395	15446	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vvu-7-1	NZ.AFSW01000084.1	+	15849	15900	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vvu-6-1	NZ.AFSX01000029.1	-	40054	40003	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yro-2-1	NZ.ACCD01000008.1	+	93813	93867	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yro-1-1	NZ.CP009787.1	+	3005532	3005586	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-13-1	NZ.CACY01000042.1	-	36129	36075	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-12-1	NZ.CACZ01000062.1	+	13330	13384	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-3-1	NZ.HF571988.1	+	128432	128486	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yen-1-4	NZ.CP011118.1	-	4578762	4578708	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmi-2-1	NZ.GG668582.1	-	34951	34902	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmi-5-1	NC.010554.1	+	3535542	3535591	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmi-8-1	NZ.JH815508.1	-	34281	34232	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmi-7-1	NZ.JH815533.1	-	71312	71263	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmi-4-1	NZ.KB206032.1	-	37018	36969	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmi-1-1	NZ.KN150749.1	-	3010571	3010522	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmi-6-1	NZ.AORN01000002.1	+	155202	155251	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmi-1-2	NZ.JTBA01000001.1	+	4050178	4050227	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmi-1-3	NZ.JTBP01000001.1	+	2513335	2513384	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmi-1-4	NZ.JTBW01000001.1	+	3605112	3605063	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmi-1-5	NZ.JTBB01000001.1	+	3920452	3920501	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pmi-1-6	NZ.JTAW01000004.1	+	2330106	2330155	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-183-1	NZ.AWIJ01000088.1	-	5725	5675	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-182-1	NZ.AWIK01000006.1	-	14426	14376	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-217-1	NZ.BAVG01000031.1	+	252975	253025	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-7-1	NZ.AOPF01000052.1	+	256268	256318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-19-1	NZ.AOOX01000058.1	+	213943	213993	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-25-1	NZ.AOOU01000022.1	+	256268	256318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-38-1	NZ.AOPH01000018.1	+	256269	256319	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-11-1	NZ.AOPA01000042.1	+	256268	256318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-41-1	NZ.AOPK01000019.1	+	256269	256319	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-42-1	NZ.AOPL01000021.1	+	256268	256318	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-14-1	NZ.AOPD01000389.1	-	14501	14451	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-39-1	NZ.AOPI01000388.1	+	10709	10759	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-12-1	NZ.AOPB01000323.1	+	40203	40253	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-40-1	NZ.AOPJ01000367.1	-	86970	86920	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-16-1	NZ.AONA01000310.1	-	14503	14453	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-22-1	NZ.AOPG01000006.1	+	43335	43385	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-15-1	NZ.AOPE01000363.1	-	33905	33855	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-13-1	NZ.AOPC01000423.1	-	12383	12333	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-28-1	NZ.JYOQ01000177.1	+	238961	239011	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vsp-29-1	NZ.JYOR01000005.1	+	238961	239011	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-234-1	NZ.AVOI01000008.1	-	16042	15992	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-174-1	NZ.AWIS01000006.1	+	25917	25967	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Vpa-108-1	NZ_AWLG01000122.1	-	5118	5068	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-68-1	NZ_AWMU01000003.1	-	5712	5662	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-209-1	NZ_AWHJ01000001.1	-	14442	14392	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-203-1	NZ_AWHP01000127.1	+	9049	9099	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-170-1	NZ_AWIW01000029.1	+	31633	31683	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-106-1	NZ_AWLJ01000091.1	+	13347	13397	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-146-1	NZ_AWJU01000061.1	+	14639	14689	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-205-1	NZ_AWHN01000015.1	-	5723	5673	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-49-1	NZ_AVPX01000004.1	-	2971905	2971855	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-3-1	NZ_AVOH01000008.1	+	32867	32917	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-76-1	NZ_AWMM01000015.1	-	5718	5668	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-57-1	NZ_AWNF01000119.1	-	5725	5675	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-75-1	NZ_AWMN01000075.1	+	9602	9652	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-10-1	NZ_AVOL01000005.1	-	2951504	2951454	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-72-1	NZ_AWMQ01000039.1	+	27138	27188	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-67-1	NZ_AWMV01000005.1	+	45007	45057	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-58-1	NZ_AWNE01000131.1	-	5731	5681	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-74-1	NZ_AWMO01000129.1	+	8347	8397	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-73-1	NZ_AWMP01000001.1	+	105903	105953	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-85-1	NZ_AWMD01000134.1	-	3102	3052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-52-1	NZ_JNVD01000062.1	+	94002	94052	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-28-1	NZ_ACFO01000016.1	+	250127	250177	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-86-1	NZ_AWMC01000105.1	-	5744	5694	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-81-1	NZ_AWMH01000023.1	-	41439	41389	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-89-1	NZ_AWLZ01000119.1	+	9880	9930	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-235-1	NZ_AVOJ01000007.1	-	62093	62043	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-90-1	NZ_AWLY01000125.1	-	2796	2746	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-93-1	NZ_AWLV01000109.1	-	5719	5669	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-96-1	NZ_AWLS01000176.1	-	2590	2540	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-92-1	NZ_AWLW01000157.1	+	8341	8391	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-91-1	NZ_AWLX01000155.1	+	8339	8389	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-82-1	NZ_AWMG01000090.1	-	5722	5672	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-227-1	NZ_AXNP01000089.1	+	9009	9059	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-228-1	NZ_AXNR01000069.1	-	232409	232359	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-223-1	NZ_AXNQ01000037.1	-	114511	114461	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-236-1	NZ_AVOK01000001.1	-	2881819	2881769	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-220-1	NZ_BAVK01000001.1	-	282471	282421	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-226-1	NZ_AXNN01000032.1	-	232504	232454	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-214-1	NZ_AMRZ01000013.1	+	20471	20521	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-149-1	NZ_AWJR01000059.1	+	15133	15183	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-145-1	NZ_AWJV01000051.1	+	19667	19717	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-136-1	NZ_AWKE01000259.1	-	3103	3053	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-109-1	NZ_AWLF01000108.1	+	338	388	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-105-1	NZ_AWLJ01000343.1	+	1646	1696	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-104-1	NZ_AWLK01000105.1	-	2793	2743	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-99-1	NZ_AWLP01000087.1	+	9324	9374	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-148-1	NZ_AWJS01000117.1	-	5712	5662	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-135-1	NZ_AWKF01000118.1	+	11247	11297	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-122-1	NZ_AWKS01000010.1	+	46837	46887	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-112-1	NZ_AWLC01000077.1	+	16312	16362	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-142-1	NZ_AWJY01000001.1	-	5717	5667	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-133-1	NZ_AWKH01000066.1	+	16328	16378	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

Vpa-110-1	NZ_AWLE01000231.1	+	1597	1647	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-100-1	NZ_AWLO01000088.1	-	5717	5667	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-147-1	NZ_AWJT01000151.1	+	6962	7012	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-134-1	NZ_AWKG01000077.1	-	5725	5675	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-102-1	NZ_AWLM01000036.1	+	11274	11324	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-150-1	NZ_AWJQ01000056.1	-	5722	5672	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-97-1	NZ_AWLR01000092.1	+	12388	12438	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-218-1	NZ_BAVI01000019.1	-	18992	18942	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-215-1	NZ_BAVH01000008.1	+	253593	253643	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-206-1	NZ_AWHM01000082.1	-	5734	5684	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-201-1	NZ_AWHR01000011.1	-	5725	5675	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-193-1	NZ_AWHZ01000070.1	-	5709	5659	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-192-1	NZ_AWIA01000080.1	+	13363	13413	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-188-1	NZ_AWIE01000003.1	+	51026	51076	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-179-1	NZ_AWIN01000218.1	-	5712	5662	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-169-1	NZ_AWIX01000099.1	+	11334	11384	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-187-1	NZ_AWIF01000009.1	-	5723	5673	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-172-1	NZ_AWIU01000005.1	-	14448	14398	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-210-1	NZ_AWHI01000010.1	+	37406	37456	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-208-1	NZ_AWHK01000122.1	+	13363	13413	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-202-1	NZ_AWHQ01000003.1	-	5715	5665	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-194-1	NZ_AWHY01000088.1	-	5707	5657	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-189-1	NZ_AWID01000085.1	-	5723	5673	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-184-1	NZ_AWII01000060.1	+	13360	13410	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-211-1	NZ_AWHH01000001.1	+	114662	114712	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-204-1	NZ_AWHO01000125.1	+	8341	8391	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-195-1	NZ_AWHX01000081.1	-	5710	5660	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-191-1	NZ_AWIB01000016.1	-	5711	5661	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-190-1	NZ_AWIC01000085.1	-	5710	5660	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-186-1	NZ_AWIG01000001.1	-	5744	5694	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-185-1	NZ_AWIH01000001.1	-	5711	5661	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-181-1	NZ_AWIL01000049.1	+	14828	14878	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-159-1	NZ_AWJH01000003.1	-	5713	5663	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-158-1	NZ_AWJI01000003.1	-	5708	5658	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-168-1	NZ_AWIY01000019.1	+	31982	32032	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-160-1	NZ_AWJG01000249.1	-	396	346	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-200-1	NZ_AWHS01000092.1	-	5726	5676	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-165-1	NZ_AWJB01000007.1	-	396	346	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-161-1	NZ_AWJF01000049.1	-	5721	5671	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-197-1	NZ_AWHV01000125.1	-	396	346	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-166-1	NZ_AWJA01000056.1	-	14431	14381	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-4-1	NZ_KI549257.1	-	292241	292191	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-9-1	NZ_KI912894.1	+	256465	256515	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-6-1	NZ_KI601405.1	-	292231	292181	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-213-1	NZ_KI929493.1	-	292480	292430	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-34-1	NZ_KI783133.1	-	291972	291922	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-17-1	NZ_KI912778.1	+	236877	236927	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-26-1	NZ_KI783213.1	-	196217	196167	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-35-1	NZ_KK042409.1	+	247870	247920	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-5-1	NZ_AFBW01000018.1	+	256269	256319	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-241-1	NZ_KK081893.1	+	21893	21943	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →
Vpa-239-1	NZ_KK081837.1	-	103889	103839	RNA → rpmE (PRK00019) Ribosomal_L31 (pfam01197) →

Vpa-243-1	NZ.KK082063.1	-	295164	295114	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-242-1	NZ.KK081954.1	+	246629	246679	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-244-1	NZ.KB932197.1	-	292184	292134	RNA → hypo →
Vpa-50-1	NC.021848.1	-	2637243	2637193	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-51-1	NC.021847.1	+	655200	655250	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-221-1	NZ.CP007004.1	+	305279	305329	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-2-1	NZ.CP009982.1	-	2981797	2981747	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-107-1	NZ.AWLH01000247.1	+	1797	1847	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-230-1	NZ.AXNS01000054.1	-	232477	232427	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-225-1	NZ.AXNO01000047.1	+	185816	185866	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vpa-216-1	NZ.BAVF01000010.1	+	243480	243530	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ehe-1-1	NZ.BAFF01000008.1	+	130616	130667	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-230-1	NZ.JXMX01000003.1	-	847619	847567	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-95-1	NZ.JNQG01000012.1	+	113897	113949	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-202-1	NZ.AYQH01000026.1	-	32643	32591	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-514-1	NZ.JHNV01000011.1	-	49699	49647	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-46-1	NZ.AYQG01000014.1	-	32634	32582	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-230-2	NZ.AYRA01000032.1	-	32648	32596	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-280-1	NZ.AYQF01000011.1	-	32645	32593	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1173-1	NZ.GL884547.1	+	79856	79908	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1617-1	NZ.KB732779.1	+	1174695	1174747	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1362-1	NZ.KE699546.1	+	733437	733489	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1272-1	NZ.KE700731.1	+	4435409	4435461	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Eco-1987-1	NZ.AOGL01000074.1	+	21073	21125	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vvu-5-1	NZ.LBNN01000028.1	+	15413	15464	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vvu-11-1	NC.005139.1	-	3092393	3092342	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vvu-4-1	NC.004459.3	+	1340353	1340404	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vvu-1-1	NZ.CP009261.1	-	3027015	3026964	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Cbr-1-7	NZ.JUYY01000023.1	+	59204	59254	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-47-1	NZ.AVOP01000007.1	+	72571	72622	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Esp-61-1	NZ.KI535657.1	-	1293528	1293477	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Hin-12-1	NC.022356.1	-	434942	434892	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-11-1	NZ.JH603153.1	+	4689088	4689139	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kmi-1-1	NZ.KK036986.1	+	403430	403481	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pst-7-1	NC.017731.1	+	2402863	2402914	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pst-6-1	NZ.DS607672.1	-	59943	59892	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Pst-2-1	NZ.CP008920.1	-	1023294	1023243	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vco-2-1	NZ.ACZN01000020.1	+	156744	156794	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vco-1-1	NZ.CP009617.1	+	3234588	3234638	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Vco-1-2	NZ.CP009264.1	+	3063229	3063279	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Yfr-3-1	NZ.CP009364.1	-	3370416	3370362	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ykr-1-1	NZ.CP009997.1	+	2908986	2909040	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Ykr-1-2	NZ.CP008955.1	+	3824913	3824967	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kmi-1-2	NZ.KK036954.1	+	23422	23473	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →
Kox-1-3	NZ.CP011636.1	-	259495	259444	RNA → rpmE (PRK00019)Ribosomal_L31 (pfam01197) →

12.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 12.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one L31-

cd00090 (1) Arsenical Resistance Operon Repressor and similar prokaryotic, metal regulated homodimeric repressors.

cd00761 (18) Glycosyltransferase family A (GT-A) includes diverse families of glycosyl transferases with a common GT-A type structural fold.

cd01347 (5) TonB dependent/Ligand-Gated channels are created by a monomeric 22 strand (22,24) anti-parallel beta-barrel.

cd03811 (12) This family is most closely related to the GT1 family of glycosyltransferases.

cd04194 (11) A4GalT-like proteins catalyze the addition of galactose or glucose residues to the lipooligosaccharide (LOS) or lipopolysaccharide (LPS) of the bacterial cell surface.

cd05399 (1) Nucleotidyltransferase (NT) domain of RelA- and SpoT-like ppGpp synthetases and hydrolases. [D/E]

cd06532 (18) Glycosyltransferase family 25 [lipooligosaccharide (LOS) biosynthesis protein]

cd07812 (4) START/RHO_alpha_C/PITP/Bet_v1/CoxG/CalC (SRPBCC) ligand-binding domain superfamily.

cd08430 (12) The C-terminal substrate binding of LysR-type transcriptional regulator IlvY, which activates the expression of ilvC gene that encoding acetohydroxy acid isomeroreductase for the biosynthesis of branched amino acids; contains the type 2 periplasmic binding fold.

cd08893 (2) Putative hydrophobic ligand-binding SRPBCC domain of an uncharacterized subgroup of CalC- and Aha1-like proteins; some contain an N-terminal GntR family winged HTH DNA-binding domain.

cd11528 (1) Nucleoside Triphosphate Pyrophosphohydrolase (EC 3).

cd11529 (1) Nucleoside Triphosphate Pyrophosphohydrolase (EC 3).

COG0035 (1) Uracil phosphoribosyltransferase [Nucleotide transport and metabolism]

COG0254 (101) Ribosomal protein L31 [Translation, ribosomal structure and biogenesis]

COG0281 (144) Malic enzyme [Energy production and conversion]

COG0438 (11) Glycosyltransferase involved in cell wall bisynthesis [Cell wall/membrane/envelope biogenesis]

COG0702 (7) Uncharacterized conserved protein YbjT, contains NAD(P)-binding and DUF2867 domains [General function prediction only]

COG0859 (133) ADP-heptose:LPS heptosyltransferase [Cell wall/membrane/envelope biogenesis]

COG1198 (3) Primosomal protein N' (replication factor Y) - superfamily II helicase [Replication, recombination and repair]

COG1368 (1) Phosphoglycerol transferase MdoB or a related enzyme of AlkP superfamily [Cell wall/membrane/envelope biogenesis]

COG1943 (3) REP element-mobilizing transposase RayT [Mobilome: prophages, transposons]

COG2194 (2) Phosphoethanolamine transferase for periplasmic glucans (OPG), alkaline phosphatase superfamily [Cell wall/membrane/envelope biogenesis]

COG2211 (1) Na⁺/melibiose symporter or related transporter [Carbohydrate transport and metabolism]

COG3060 (2) Transcriptional regulator of met regulon [Transcription, Amino acid transport and metabolism]

COG3306 (4) Glycosyltransferase involved in LPS biosynthesis, GR25 family [Cell wall/membrane/envelope biogenesis]

COG3550 (1) Serine/threonine protein kinase HipA, toxin component of the HipAB toxin-

Gammaproteobacteria RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 12.2.

antitoxin module [Signal transduction mechanisms]

pfam00126 (12) Bacterial regulatory helix-turn-helix protein, lysR family.

pfam00535 (2) Glycosyl transferase family 2.

pfam00593 (3) TonB dependent receptor.

pfam00742 (2) Homoserine dehydrogenase.

pfam01197 (10003) Ribosomal protein L31.

pfam01755 (73) Glycosyltransferase family 25 (LPS biosynthesis protein).

pfam06178 (1) Oligogalacturonate-specific porin protein (KdGM).

pfam06306 (3) Beta-1,4-N-acetylgalactosaminyltransferase (CgtA).

pfam07526 (9) Associated with HOX.

pfam11066 (7) Protein of unknown function (DUF2867).

pfam13439 (9) Glycosyltransferase Family 4.

pfam13460 (7) NAD(P)H-binding.

pfam13641 (14) Glycosyltransferase like family 2.

pfam13692 (23) Glycosyl transferases group 1.

PRK00019 (10104) 50S ribosomal protein L31; Reviewed

PRK00129 (1) uracil phosphoribosyltransferase; Reviewed

PRK00528 (8) 50S ribosomal protein L31; Reviewed

PRK01678 (16) 50S ribosomal protein L31 type B; Reviewed

PRK05269 (2) transcriptional repressor protein MetJ; Provisional

PRK05580 (3) primosome assembly protein PriA; Validated

PRK09466 (2) bifunctional aspartate kinase II/homoserine dehydrogenase II; Provisional

PRK09562 (1) nucleoside triphosphate pyrophosphohydrolase; Reviewed

PRK09775 (1) putative DNA-binding transcriptional regulator; Provisional

PRK10073 (2) putative glycosyl transferase; Provisional

PRK10792 (2) lipopolysaccharide core biosynthesis protein; Provisional

PRK11204 (2) N-glycosyltransferase; Provisional

PRK11560 (2) phosphoethanolamine transferase; Provisional

PRK11716 (12) DNA-binding transcriptional regulator IlvY; Provisional

PRK13524 (4) outer membrane receptor FepA; Provisional

PRK13528 (3) outer membrane receptor FepA; Provisional

PRK14515 (1) aspartate ammonia-lyase; Provisional

PRK15171 (11) lipopolysaccharide 1,3-galactosyltransferase; Provisional

smart00919 (144) Malic enzyme, NAD binding domain.

smart00954 (1) Region found in RelA / SpoT proteins.

TIGR00792 (1) sugar (Glycoside-Pentoside-Hexuronide) transporter. [Transport and binding proteins, Carbohydrates, organic alcohols, and acids]

TIGR01783 (1) TonB-dependent siderophore receptor. [Transport and binding proteins, Cations and iron carrying compounds, Transport and binding proteins, Porins]

TIGR02193 (53) lipopolysaccharide heptosyltransferase I. [Cell envelope, Biosynthesis and degradation of surface polysaccharides and lipopolysaccharides]

TIGR02195 (9) lipopolysaccharide heptosyltransferase II. [Cell envelope, Biosynthesis and degradation of surface polysaccharides and lipopolysaccharides]

TIGR02201 (63) lipopolysaccharide heptosyltransferase III, putative. [Cell envelope, Biosynthesis and degradation of surface polysaccharides and lipopolysaccharides]

TIGR03937 (2) poly-beta-1,6 N-acetyl-D-glucosamine synthase.

12.4 Multiple-sequence alignment

Each L31-Gammaproteobacteria RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 12.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The L31-Gammaproteobacteria RNA itself is denoted by the line underneath marked 5' and 3' on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded green. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-

Crick or G-U pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, red nucleotides: nucleotide identity conserved more than 97% of the time, black nucleotides: 90%, gray nucleotides: 75%, red circle (◐): nucleotide is present 97% of the time, black circle (◑): 90%, gray circle (◒): 75%, white circle (◓): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Aac-10-1, Aac-12-1, Aac-13-1, Aac-15-1, Aac-16-1, Aac-19-1, Aac-2-1, Aac-20-1, Aac-3-1, Aac-4-1, Aac-5-1, Aac-5-2, Aac-6-2, Aac-7-1, Aac-8-1, Aac-9-1, Aal-1-2, Aap-1-1, Aap-2-1, Aap-3-1, Aap-4-1, Aaq-1-1, Aau-2-1, Aau-2-2, Abe-1-1, Aca-1-1, Aca-2-1, Adh-1-1, Adh-1-2, Adh-1-3, Adi-1-1, Aen-1-1, Aen-2-1, Aen-2-2, Aen-2-3, Afi-3-1, Afl-1-1, Ahy-1-1, Ahy-1-2, Ahy-10-1, Ahy-11-1, Ahy-12-1, Ahy-13-1, Ahy-14-1, Ahy-15-1, Ahy-16-1, Ahy-17-1, Ahy-18-1, Ahy-19-1, Ahy-2-1, Ahy-20-1, Ahy-21-1, Ahy-3-1, Ahy-4-1, Ahy-5-1, Ahy-6-1, Ahy-7-1, Ahy-8-1, Ahy-9-1, Aja-2-1, Aje-1-1, Ala-1-1, Alo-1-1, Alo-2-1, Ama-10-1, Ama-11-1, Ama-12-1, Ama-13-1, Ama-2-1, Ama-2-2, Ama-2-3, Ama-3-1, Ama-4-1, Ama-5-1, Ama-6-1, Ama-8-1, Ama-9-1, Ame-1-2, Ame-1-3, Ame-2-1, Apa-2-1, Apa-3-1, Apa-4-1, Apl-1-2, Apl-1-3, Apl-1-4, Apl-1-5, Apl-1-6, Apl-10-1, Apl-11-1, Apl-12-1, Apl-13-2, Apl-14-1, Apl-15-1, Apl-2-1, Apl-3-1, Apl-4-1, Apl-4-2, Apl-5-1, Apl-7-1, Apl-9-1, Apo-1-1, Asa-1-1, Asa-2-1, Asa-3-1, Asa-4-1, Asa-5-1, Asa-5-2, Asa-5-3, Asa-5-4, Asa-6-1, Asa-7-1, Asa-8-1, Ase-1-1, Ase-2-1, Aso-1-1, Asp-1-1, Asp-2-1, Asp-3-1, Asp-4-1, Asp-6-1, Asu-2-1, Ata-1-2, Ave-1-1, Ave-1-2, Ave-1-3, Ave-2-1, Ave-3-1, Ave-4-1, Ave-5-1, Ave-6-1, Ave-7-1, Ave-9-1, Cam-1-2, Cam-1-3, Cbr-1-1, Cbr-1-2, Cbr-1-3, Cbr-1-4, Cbr-1-5, Cbr-1-6, Cco-1-1, Cdu-1-1, Cdu-2-1, Cdu-3-1, Cdu-4-1, Cdu-5-1, Cfr-1-1, Cfr-1-2, Cfr-1-3, Cfr-1-4, Cfr-10-1, Cfr-11-1, Cfr-2-1, Cfr-2-2, Cfr-4-1, Cfr-5-1, Cfr-6-1, Cfr-7-1, Cfr-8-1, Cfr-9-1, Cko-1-1, Cko-1-2, Cma-1-1, Cma-1-2, Cma-1-3, Cma-1-4, Cma-1-5, Cma-2-1, Cma-3-1, Cma-4-1, Cma-5-1, Cmi-1-1, Cne-1-2, Cpa-1-1, Cro-1-1, Cro-3-1, Csa-1-1, Csa-11-1, Csa-12-1, Csa-14-1, Csa-15-1, Csa-16-1, Csa-2-1, Csa-3-1, Csa-4-1, Csa-5-1, Csa-6-1, Csa-8-1, Csa-9-1, Csp-1-1, Csp-10-1, Csp-11-1, Csp-13-1, Csp-15-1, Csp-16-1, Csp-17-1, Csp-18-1, Csp-19-1, Csp-2-1, Csp-20-1, Csp-3-1, Csp-4-1, Csp-5-1, Csp-6-1, Csp-7-1, Csp-8-1, Csp-9-1, Ctu-1-1, Ctu-2-1, Ctu-3-1, Ctu-4-1, Cun-1-2, Dch-1-1, Dch-4-1, Dda-3-1, Dda-4-1, Dda-5-1, Ddi-1-1, Ddi-2-1, Ddi-3-1, Ddi-4-1, Dso-1-1, Dso-2-1, Dso-3-1, Dso-5-1, Dso-6-1, Dsp-4-1, Dsp-5-1, Dsp-6-1, Dsp-7-1, Dsp-8-1, Dze-1-1, Dze-3-1, Dze-4-1, Dze-5-1, Dze-6-1, Dze-8-1, Dze-9-1, Eae-1-1, Eae-2-1, Eae-3-1, Eal-1-1, Eal-3-1, Eal-4-1, Eal-5-1, Eam-10-1, Eam-11-1, Eam-12-1, Eam-13-1, Eam-14-1, Eam-15-1, Eam-3-1, Eam-4-1, Eam-5-1, Eam-6-1, Eam-7-1, Eam-8-1, Eam-9-1, Ean-1-1, Ean-2-1, Ean-3-1, Ean-4-1, Eas-1-1, Eas-1-2, Eas-2-1, Eas-3-1, Eas-4-1, Eba-3-1, Eba-5-1, Eca-1-1, Eca-2-1, Eca-4-1, Eca-7-1, Ecl-1-1, Ecl-1-10, Ecl-1-11, Ecl-1-12, Ecl-1-2, Ecl-1-3, Ecl-1-4, Ecl-1-5, Ecl-1-7, Ecl-1-8, Ecl-1-9, Ecl-10-1, Ecl-11-1, Ecl-12-1, Ecl-13-1, Ecl-14-1, Ecl-15-1, Ecl-16-1, Ecl-17-1, Ecl-18-1, Ecl-19-1, Ecl-2-1, Ecl-20-1, Ecl-21-1, Ecl-22-1, Ecl-23-1, Ecl-24-1, Ecl-25-1, Ecl-26-1, Ecl-27-1, Ecl-28-1, Ecl-28-2, Ecl-28-3, Ecl-28-4, Ecl-28-5, Ecl-28-6, Ecl-29-1, Ecl-3-1, Ecl-30-1, Ecl-31-1, Ecl-32-1, Ecl-33-1, Ecl-34-1, Ecl-35-1, Ecl-36-1, Ecl-37-1, Ecl-38-1, Ecl-4-1, Ecl-40-1, Ecl-41-1, Ecl-43-1, Ecl-44-1, Ecl-45-1, Ecl-46-1, Ecl-47-1, Ecl-48-1, Ecl-49-1, Ecl-5-1, Ecl-50-1, Ecl-51-1, Ecl-52-2, Ecl-52-3, Ecl-52-4, Ecl-52-5, Ecl-53-1, Ecl-54-1, Ecl-55-1, Ecl-56-1, Ecl-57-1, Ecl-58-1, Ecl-59-1, Ecl-6-1, Ecl-61-1, Ecl-62-1, Ecl-63-1, Ecl-64-1, Ecl-65-1, Ecl-66-1, Ecl-67-1, Ecl-68-1, Ecl-69-1, Ecl-7-1, Ecl-70-1, Ecl-8-1, Ecl-9-1, Eco-1-1, Eco-1-2, Eco-1-3, Eco-1-4, Eco-10-1, Eco-100-1, Eco-1000-1, Eco-1001-1, Eco-1002-1, Eco-1003-1, Eco-1004-1, Eco-1005-1, Eco-1006-1, Eco-1007-1, Eco-1008-1, Eco-1009-1, Eco-101-1, Eco-1010-1, Eco-1012-1, Eco-1013-1, Eco-1014-1, Eco-1015-1, Eco-1016-1, Eco-1017-1, Eco-1018-1, Eco-1019-1, Eco-1019-2, Eco-1019-3, Eco-102-1, Eco-1020-1, Eco-1021-1, Eco-1022-1, Eco-1023-1, Eco-1024-1, Eco-1025-1, Eco-1026-1, Eco-1027-1, Eco-1028-1, Eco-1029-1, Eco-103-1, Eco-1030-1, Eco-1031-1, Eco-1032-1, Eco-1033-1, Eco-1034-1, Eco-1035-1, Eco-1036-1, Eco-1037-1, Eco-1038-1, Eco-1039-1, Eco-104-1, Eco-1040-1, Eco-1041-1, Eco-1042-1, Eco-1043-1, Eco-1044-1, Eco-1045-1, Eco-1046-1, Eco-1047-1, Eco-1048-1, Eco-1049-1, Eco-105-1, Eco-1050-1,

Eco-726-1, Eco-727-1, Eco-728-1, Eco-728-2, Eco-729-1, Eco-73-1, Eco-730-1, Eco-731-1, Eco-732-1, Eco-733-1, Eco-734-1, Eco-735-1, Eco-736-1, Eco-737-1, Eco-738-1, Eco-739-1, Eco-74-1, Eco-740-1, Eco-741-1, Eco-742-1, Eco-743-1, Eco-744-1, Eco-745-1, Eco-746-1, Eco-747-1, Eco-748-1, Eco-749-1, Eco-75-1, Eco-750-1, Eco-751-1, Eco-752-1, Eco-752-2, Eco-753-1, Eco-754-1, Eco-755-1, Eco-756-1, Eco-757-1, Eco-758-1, Eco-759-1, Eco-76-1, Eco-760-1, Eco-761-1, Eco-762-1, Eco-764-1, Eco-765-1, Eco-766-1, Eco-767-1, Eco-768-1, Eco-769-1, Eco-77-1, Eco-770-1, Eco-771-1, Eco-772-1, Eco-773-1, Eco-774-1, Eco-775-1, Eco-776-1, Eco-777-1, Eco-778-1, Eco-779-1, Eco-78-1, Eco-780-1, Eco-781-1, Eco-782-1, Eco-783-1, Eco-784-1, Eco-785-1, Eco-786-1, Eco-787-1, Eco-788-1, Eco-789-1, Eco-79-1, Eco-790-1, Eco-791-1, Eco-792-1, Eco-793-1, Eco-794-1, Eco-795-1, Eco-796-1, Eco-797-1, Eco-798-1, Eco-799-1, Eco-8-1, Eco-80-1, Eco-800-1, Eco-801-1, Eco-802-1, Eco-803-1, Eco-804-1, Eco-805-1, Eco-806-1, 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 Ami-1-1 CUUUUGAUCUCUGAAUAUUAUUGCCUAAAUAACGCCACUCUUUUUUGGCGUUAACAAGAUUUUAACUUAUUUUUUUUC
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 env-8 AAUUCUGCAUUAAUUAUGCGGUUGAUCUUCGCUACAUAUUUACUUUAGAAUACGCCAUCUUUUUUGGCGUUAAGGNCUAUC
 env-9 UUGGUUGAUCUCCACAGGAAAUAUCAUAUUUACGCCAUCUUUUUUGGCGUUAUUUAGAUUUUAGCGUUAUUUUUUUUC
 env-10 UUGGUUGAUCUCCACAGGAAAUAUCAUAUUUACGCCAUCUUUUUUGGCGUUAUUUAGAUUUUAGCGUUAUUUUUUUUC
 Hsp-3-1 UUGGUUGAUCUCCACAGGAAAUAUCAUAUUUACGCCAUCUUUUUUGGCGUUAUUUAGAUUUUAGCGUUAUUUUUUUUC
 Ami-2-1 GCUUGAUCUCUUUACUUUACUCGUCUAAAUAACGCCAUCUUUUUUGGCGUUAACAUCUUUUUUAACUUAUUUUUUUUC
 Lgr-1-1 UGCGUGGUUAUCUCUAGCCGUAUUAAUCUGCGGCCUUUUAUCUCAAUGAGGGUCAAAACCAUCACCCAAUUUUUUUUC
 Asu-1-1 ACAGUCUUGAAUUAUGUUAUUUUUUGGUAUUUUUUGGCGUUAUUUUCUGGUCGACCCGUGCAGCGUUAUUUUUUUUC
 env-11 UGCGUCGGGAUGCAUUCUGAUAAGAUUCUGCGUCCAUUUAGCAGUGCAUUAUUGCAUUUUGCUUAUUUUUUUUC
 env-12 GCUAUGGUAUCGUAUUUUUUGCGGCCGAAUACAGCAUGCGCAAGCGCAGAGUUUGCACCUGGUUGGACNACAGUAUC
 env-13 GCUAUGGUAUCGUAUUUUUUGCGGCCGAAUACAGCAUGCGCAAGCGCAGAGUUUGCACCUGGUUGGACCCACAGUAUC
 env-14 UGAUGCCACAUAUUGCAAGAAUUGCGGGUCUUUUUCGGCAGGGCAUGAUUGGCCCCGUCUUGCAUUUUGAUUCAA
 env-15CGCAGGGCAUGAUUGGCCCCGUCUUCUCAAUUUGAUCAA
 env-16 UGCGACACUAUUUGCAAGUAAAGAUUCGGGUCUUUUUGGCGGGCAUGAUUGGCCCCGUCUUCUCAAUUUGAUUCAA
 env-19 UGCGACACUAUUUGCAAGUAAAGAUUCGGGUCUUUUUGGCGGGCAUGAUUGGCCCCGUCUUCUCAAUUUGAUUCAA
 env-20 UGCGACACUAUUUGCAAGUAAAGAUUCGGGUCUUUUUGGCGGGCAUGAUUGGCCCCGUCUUCUCAAUUUGAUUCAA
 env-21 UGCAGCAUAUUUGCAAGUAAAGAUUCGGGUCUUUUUGGCGGGCAUGAUUGGCCCCGUCUUCUCAAUUUGAUUCAA
 Msu-1-1 UGUGGCAUAUUUGCAAGUAAAGAUUCGGGUCUUUUUGGCGGGCAUGAUUGGCCCCGUCUUCUCAAUUUGAUUCAA
 env-23 UGUGGUCGGGUUUGCAAGUAAAGAUUCGGGUCUUUUUGGCGGGCAUGAUUGGCAAGCGUUCUUUCAAUUUGAUUCAA
 env-24 UGUGGUCGGGUUUGCAAGUAAAGAUUCGGGUCUUUUUGGCGGGCAUGAUUGGCAAGCGUUCUUUCAAUUUGAUUCAA
 Vli-1-1 UGUGGUCGGGUUUGCAAGUAAAGAUUCGGGUCUUUUUGGCGGGCAUGAUUGGCAAGCGUUCUUUCAAUUUGAUUCAA
 Mma-1-1 UGUGUUGAUCGAGGAGAGGAAUACUUAUUUACUGCGCCUUAACGAUUAUUUUUUAUUAUUUUUUUAUUAACA
 env-45 AUGUAGUUUAUUUUGCAUCUCGUAUUGAUUUUUGGGGUAAGAUUCUUAUUUUAUCGACCCUAAAUAUUUUAUUAACU
 env-46 CUUGAACUAACAUAUUUUUUGCUGAACAAUUCGAGCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-47 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACUCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-49 UUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-50 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 Asp-10-1 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-51 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-52 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-56 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-57 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-58 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-59 UUGAACUACGCUAAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-61 UUGAACUACGCUAAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-63 UGAACUACACUAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGGGUGCAUUUUGAAUUGGCAUAAAUAUUUAUC
 env-71 UGAACUACACUAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGGGUGCAUUUUGAAUUGGCAUAAAUAUUUAUC
 env-73A.....
 Aac-6-1 UUGAAUUGCGCUUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 Aac-18-1 UUGAAUUGCGCUUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-74 UUGAACUACGCUAAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 Aac-11-1 UUGAAUUGCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-76 UUGAACUACGCUAAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 Aac-17-1 UUGAAUUGCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 Aac-1-1 CUUGAAUUGCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 Aac-14-1 UUGAAUUGCGCUUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-77G.....CUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-86 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-87 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-88 CUUGAACUAACUUGGAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-89 UUGAACUACGCUAAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-90 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-91 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-93 CUUGAACUACUUGCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-94 GUUGAAUGUCAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 env-95 CUUGAACUAACUUGGAUUUUUUGCUGUAAAUAUUCGACCCUUAACACAAAGCGUGCAUUUUAUUUGGCUAAUUAUUUAUC
 Pda-1-1 AUCCGACUUGCAACUUUACCGCUUUUUUGCAUUUUUGGCAUUAUUAUUUUUUGGCUAAUUAUUUAUC
 Pmu-14-1 UUUUGCUUGAAUUUUUGCAUUUUUUUGAAUUUUUGCAUUAUUAUUUUUUGGCUAAUUAUUUAUC
 Pmu-2-1 CUUCUACUUGCAACUUUACUCGUUUUUUGCAUUUUUGGCAUUAUUAUUUUUUGGCUAAUUAUUUAUC
 Pmu-8-1 AAAAUUGGUUAAAUAUUUUUUGAAUUUUUGAAUUCACAGCUUUAUUAUUUUUUGGCUAAUUAUUUAUC
 Pmu-12-1 GGCUUGAAUUAUUCUGCUUUUUUUUGAAUUUUUGGCAUUAUUAUUUUUUGGCUAAUUAUUUAUC
 Pmu-3-1 UACUUUGCAAGACUGUCCUUUUUUUGAACAAUUCGACCCUUAACAAUUAUUUUUUGGCUAAUUAUUUAUC
 Pmu-6-1 UCUGCUUGCAACUUUUUUCUUUUUUUGAACAAUUCGACCCUUAACAAUUAUUUUUUGGCUAAUUAUUUAUC
 Mma-3-1 AUUUUUUAAGGUUAUUUUUUGGCGUCUUAUAUUAUUUUUUGGCAUUAUUUUUUGGCUAAUUAUUUAUC
 Msu-2-1 UUUUUUAAGGUUAUUUUUUGGCGUCUUAUAUUAUUUUUUGGCAUUAUUUUUUGGCUAAUUAUUUAUC
 env-96 AAAGCACACCUUGAUCUAAUUUGAUUUUUUUGAUAUUUCGACGUCUUAUUUGGCGCGGAUUUGCGGCGAUUUUAAC
 env-97 AAAGCACACCUUGAUCUAAUUUGAUUUUUUUGAUAUUUCGACGUCUUAUUUGGCGCGGAUUUGCGGCGAUUUUAAC
 Hpa-2-2 AAAGCACACCUUGAUCUAAUUUGAUUUUUUUGAUAUUUCGACGUCUUAUUUGGCGCGGAUUUGCGGCGAUUUUAAC
 env-101 UGUANNNNNNNNNAUCUAAUUUGAUUUUUUUGAUAUUUCGACGUCUUAUUUGGCGCGGAUUUGCGGCGAUUUUAAC
 env-102 AAAGCACACCUUGAUCUAAUUUGAUUUUUUUGAUAUUUCGACGUCUUAUUUGGCGCGGAUUUGCGGCGAUUUUAAC
 env-103 AAAGCACACCUUGAUCUAAUUUGAUUUUUUUGAUAUUUCGACGUCUUAUUUGGCGCGGAUUUGCGGCGAUUUUAAC

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Vsc-1-1 UUCAUUACUUAUCUGCGCCUUAAGCACUAUGGCCUGGUGAUUUUAUCAUUAAAGCGGUGAGCGGAAUUUUUUUAUUAACC
Vic-1-1 AUUCGUAUCUUAUCUGCGCCUUAAGCACUAUGGCCUGAUGAUUUCGUUAUCUUCGGCGGUAAGAGCGAAUUUUUUUAUUAACU
Awo-1-1 GAUUGAUCGCGCCGGAUUAUCAUUUAUCGCGACCUUAAGUAAGUGUAUCUUGUUUACGUUUUUUUUUUUUUUAUUAACU
Asa-11-1 GAUUGAUCGCGCCGGAUUAUCAUUUAUCGCGACCUUAAGUAAGUGUAUUUUUUUAUUAUCGUUUUUUUUUUUUUUAUUAACU
env-642CGGUGUCUUUAUCUUAUUUUUUUAACA
Vta-2-1 UCAUUACUAUACUGCGCCUUAAGGUAUGGCCUUUAUCGCGGUAUGGUAUACAGCGGUGUCUUUUUUUUUUUUUAUUAACU
env-643 UCAUUACUAUACUGCGCCUUAAGGUAUGGCCUUUAUCGCGGUAUGGUAUACAGCGGUGUCUUUUUUUUUUUUUAUUAACU
Vta-3-1 UCAUUACUAUACUGCGCCUUAAGGUAUGGCCUUUAUCGCGGUAUGGUAUACAGCGGUGUCUUUUUUUUUUUUUAUUAACU
env-646 UGGAUUCUAUUAUCUUAUCGCGCCUUAAGGUAUGGCCUUUAUCGCGGUAUGGUAUACAGCGGUAUACUUAUUUUUUUAUUAACU
Vsh-2-1 UACUUAUACUGCGCCUUAUGGUAUGGCCUUUAUCGCGGUAUGGUAUACAGCGGUAUACUUAUUUUUUUUUUUAUUAACU
Vma-1-1 UACUUAUACUGCGCCUUAUGGUAUGGCCUUUAUCGCGGUAUGGUAUACAGCGGUAUACUUAUUUUUUUUUUUAUUAACU
Vma-1-2 UACUUAUACUGCGCCUUAUGGUAUGGCCUUUAUCGCGGUAUGGUAUACAGCGGUAUACUUAUUUUUUUUUUUAUUAACU
Vme-1-1 UGCGGUGGAUUCUAUUUAUUAUCGCGCCUUAAGGUAUGGCCUUUAUCGCGGUAUGGUAUACAGCGGUAUACUUAUUUUUUUAUUAACU
Ymo-1-1 UUCGCGCCUUUUGUAUUAUUCGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Ybe-1-1 UUCGCGCCUUUUGUAUUAUUCGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Yma-2-1 UUCGCGCCUUUUGUAUUAUUCGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Yfr-1-1 UUCGCGCCUUUUGUAUUAUUCGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Yma-1-1 UUCGCGCCUUUUGUAUUAUUCGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Yfr-1-5 UUCGUAUACAAACUCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUUUAUUAACU
Ype-1-1 UUCGCGCCUUUUGUAUUAUUCGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Yfr-1-7 UCGAUUAUCAAACUCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUUUAUUAACU
Yfr-1-8 UCGAUUAUCAAACUCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUUUAUUAACU
Yfr-2-2 UUCGUAUACAAACUCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUUUAUUAACU
Yfr-1-14 UUCGUAUACAAACUCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUUUAUUAACU
Yfr-1-15 UUCGCGCCUUUUGUAUUAUUCGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Epi-1-1 GUGAUUGCGUUGGCGGUAUUUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Epi-1-2 GUGAUUGCGUUGGCGGUAUUUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Eic-2-1 GUGAUUGCGUUGGCGGUAUUUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Eta-2-1 GUGAUUGCGUUGGCGGUAUUUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Eho-5-1 GUGAUUGCGUUGGCGGUAUUUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Eta-4-1 GUGAUUGCGUUGGCGGUAUUUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Yal-1-1 UUCGCGCCUUUUGUAUUAUUCGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Yen-14-1 UUCGCGCCUUUUGUAUUAUUCGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Yal-1-4 UUCGCGCCUUUUGUAUUAUUCGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Yen-21-1 UUCGCGCCUUUUGUAUUAUUCGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Ype-127-1UUGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Yal-2-1 UUCGCGCCUUUUGUAUUAUUCGUAUACAAUCCUGUUAACAGCGGUAUACUUAUUUUUUUUUUUUUAUUAACU
Ynu-1-1 AUUCGUAUUGCGAGGGGUGUCAAUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Yru-1-1 AUUCGUAUUGCGAGGGGUGUCAAUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Dze-2-1 UCCAUUUGCAUCGCGGUAUUUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Dsp-1-1 UCCAUUUGCAUCGCGGUAUUUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Ssp-23-1 AUGUGAUCGCAUCAGCGUACUUAUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
env-647AGUAAAAAGAAUUAUUAUUUUUUUAUUAACU
Lqu-1-3 UGCAUUGCGUGGUAUUUUUCUGUAUUCGCGCCUUUUAUACCGGUAUUAUUUUUUUUUUUUUAUUAACU
Dsp-2-1 UCCAUUUGCAUCGCGGUAUUUUUCUGUAUUCGCGCCUUUUAUACCGGUAUUAUUUUUUUUUUUUUAUUAACU
Dze-7-1 UCCAUUUGCAUCGCGGUAUUUUUCUGUAUUCGCGCCUUUUAUACCGGUAUUAUUUUUUUUUUUUUAUUAACU
Dch-3-1 CCAUUUUUGCAUCAGCGGUAUUUUUCUGUAUUCGCGCCUUUUAUACCGGUAUUAUUUUUUUUUUUUUAUUAACU
Dch-2-1 UCCAUUUGCAUCAGCGGUAUUUUUCUGUAUUCGCGCCUUUUAUACCGGUAUUAUUUUUUUUUUUUUAUUAACU
Dda-1-1 UCCAUUUGCAUCAGCGGUAUUUUUCUGUAUUCGCGCCUUUUAUACCGGUAUUAUUUUUUUUUUUUUAUUAACU
Dda-2-1 UCCAUUUGCAUCAGCGGUAUUUUUCUGUAUUCGCGCCUUUUAUACCGGUAUUAUUUUUUUUUUUUUAUUAACU
Dch-1-2 UCCAUUUGCAUCAGCGGUAUUUUUCUGUAUUCGCGCCUUUUAUACCGGUAUUAUUUUUUUUUUUUUAUUAACU
Dsp-9-1 UCUGAUUGCAUCAUAGGUAUUUUUCUGUAUUCGCGCCUUUUAUACCGGUAUUAUUUUUUUUUUUUUAUUAACU
Xdo-1-1 CAUUGCGAAUUAACAGAUUAUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Xpo-1-1 CGGCAUUAUUAACCGAUUAUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Xbo-11-1 UCAUUGCGCAUUAUUAACCGAUUAUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Xbo-8-1 UUAUUGCGCAUUAUUAACCGAUUAUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Xbo-6-1 UCAUUGCGCAUUAUUAACCGAUUAUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Xsz-1-1 CAUUGCAUUAUUAACCGAUUAUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Xca-1-1 UCAUUGCGCAUUAUUAACCGAUUAUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Xkh-1-1 AUUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Xsp-1-1 UCAUUGCGCAUUAUUAACCGAUUAUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Xne-5-1 CAUUGCGCAUUAUUAACCGAUUAUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Plu-5-1 UCAUUGCGAGAUAGGAGAUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Plu-9-1 UUCAUUGCGGGAUAGGAGAUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Plu-7-1 UUCAUUGCGGGAUAGGAGAUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Plu-6-1 UUCAUUGCGGGAUAGGAGAUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Pte-4-1 UUCAUUGCGGGAUAGGAGAUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Pte-6-1 UUCAUUGCGGGAUAGGAGAUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Plu-10-1 UUCAUUGCGGGAUAGGAGAUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Pte-2-1 UUCAUUGCGGGAUAGGAGAUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Ssp-15-1 GAUCCGAUUGCGGGAUUAUUUUUUUCUGUAUUAUUUUUUUUUUUUUAUUAACU
Pca-2-1 AUUCUGUAUUCGCGCCCAUUAUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Pca-1-1 CUUUGUGUUCGCAAGUGAUGGUAUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Ddi-5-1 UCCAUUUGCAUCGCGGUAUUUUUCUGUAUUCGCGCCUUUUAUACCGGUAUUAUUUUUUUUUUUUUAUUAACU
Ssp-13-1 GCAGAUCCGUAUUGCGGGAUUAUUUUUUUCUGUAUUAUUUUUUUUUUUUUAUUAACU
Dpa-1-1 UGAUUAUUGCAUCUUCGUAUUUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Sfo-1-1 GAUCCGAUUGCGGGAUUAUUUUUUUCUGUAUUAUUUUUUUUUUUUUAUUAACU
Pca-7-1 CGGAUUGCAUCGCGGUAUUAUUUUUUUCUGUAUUCGCGCCUUUUGUAUUAUUUUUUUUUUUUUAUUAACU
Ppa-2-1 AUUCUGUAUUCGCGCCCAUUGUGUUCGCGCAAAUUAUUCGCGGUAUUAUUUUUUUUUUUUUAUUAACU
Pat-3-1 UGUGUGCGUAAGAAUUAUCGUGUUCGCGCAAAUUAUUCGCGGUAUUAUUUUUUUUUUUUUAUUAACU
Psp-55-1 UUCUGUAUUCGCGCCCAUUGUGUUCGCGCAAAUUAUUCGCGGUAUUAUUUUUUUUUUUUUAUUAACU
Pwa-2-1 UUGUGUGCGUAAGAAUUAUCGUGUUCGCGCAAAUUAUUCGCGGUAUUAUUUUUUUUUUUUUAUUAACU
Pca-8-1 UCUGUAUUCGCGCCCAUUGUGUUCGCGCAAAUUAUUCGCGGUAUUAUUUUUUUUUUUUUAUUAACU
Bgo-1-1 GGAGAUAGUUCUGUAUUCGCGCCAUUAUUCGCGGUAUUAUUUUUUUUUUUUUAUUAACU

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env-700 CAUCAAACUCCAAAACCCGGGAAAUCGCUAAGCCGGUUUACGCCAGCGGGCGAAGGUCGCGGAAAUAUUUAUA
env-701 UUUGCAUACGCAGGUCAAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGCUUUUUGCAGCGUCAAAAUAUACUAUUUAACA
env-702 UCAGUUUGCAUACCGUUGGUCAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAAAAGAAUAUACAUAACA
Ksp-8-1 UUUGAUGCGCUUUGCGGCCAUCAAAUAUUUACCCGGGAUUUUGCGCUUCGCGCAAUCGACCCGGAAAUAUUUAACA
Ecl-52-1 UCAGUUUGCAUACCGUUGGUCAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAAAAGAAUAUACAUAACA
env-706 UCAGUUUGCAUACCGUUGGUAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAAAAGAAUAUACAUAACA
env-710 UUUGAUGCGCUUUGCGGUAUCAAAAUAUUUACCCGGCAAUUUUGCGCUUUGCGCAAUCGACCCGGAAAUAUUUAACA
Kva-1-1 UUAUACCGCAUUGGAGGUAUGACUAUUACCGUACGCUUCGCGCUGUCAGCAGCGUGGAAAGAGCAGCGGAAAUAUUUAUA
env-711 UCAGUUUGCAUACCGUUGGUCAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAAAAGAAUAUACAUAACA
env-712 CAUCAAACUCCAAAACCCGGGAAAUCGCUAAGCCGGUUUUGCGCCAGCUGUGGAAAGGUCGUGCGGAAAUAUUUAUA
env-713 AUCAAACUCCAAAACCCGGGAAAUCGCUAAGCCGGUUUACGCCAGCGGGCGAAGGUCGUGCGGAAAUAUUUAUA
Ecl-39-1 UCAGUUUGCAUACAGCUGUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAGAAUAUACAUAACA
env-714 GAUUCGCCGCCUUUGAUGCGCUUUGGUGCAUCAAAAUAUUUACCCGGUAGUUAUUCGCCGGGAAAUAUUUAACA
Ecl-1-6 UCAGUUUGCAUACGUGGUCAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAAAAGAAUAUACAUAACA
env-715 UCAGUUUGCAUACCCGUGUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGCAUUUGCAUCAAAGAAUAUACAUAACA
env-717 UUUGGUGCGCUUCGUGCAGCAUAGAAUAUUUACCCGGGUAUUCGCUUAGCGGAAUUCGCCGGGAAAUAUUUAACA
env-720 UUGCAUACGGGGUCAAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGCUUUUUGCAGCGUCAAAAUAUACAUAUAACA
env-724AGANNUUAUAUACAUAACA
env-725UCAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAAAAGAAUAUACAUAACA
env-726 UCAGUUUGCAUACGUGGUCAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAAAAGAAUAUACAUAACA
env-728 AUCAAACUCCAAAACCCGGGAAAUCGCUAAGCCGGUUUACGCCAGCUGUGGAAAGGUCGUGCGGAAAUAUUUAUA
env-729 AUCAAACUCCAAAACCCGGGAAAUCGCUAAGCCGGUUUACGCCAGCUGUGGAAAGGUCGUGCGGAAAUAUUUAUA
env-730 UUUGAUGCGCUUUGCGGCCAUCAAAUAUUUACCCGGCAAUUUUGCGCUUUGCGCAAUCGACCCGGAAAUAUUUAACA
env-731 UUGCAUACAGGGUCAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGCUUUUUGCAGCGUCAAAAUAUACAUAUAACA
Lad-1-2 UCAGUUUGCAUACCCGUGUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGCAUUUGCAUCAAAGAAUAUACAUAACA
env-732 UUAUACCGCAUUGAAGAUUGACCUAUCGUGGUCUUCAGCUGUCAGCAGCGUAGAGGGCGAGCGGAAAUAUACAUAUA
env-735 UUAUACCGCAUUGGAGAUUGACCUAUCGUGGUCUUCAGCUGUCAGCAGCGUAGAGGCGAGCGGAAAUAUACAUAUA
Rte-1-1 UGUGCUUCGUGCAGUGCAAAGCCUUAUAUUUACCCUAGAUUCGCCAGCGGGAAAGCUCAGCGGAAAUAUUUAACA
Eho-1-9 UCAGUUUGCAUACGUGGUAUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAAAAGAAUAUACAUAACA
env-736 UUAUACCGCAUUGGAGAUUGACCUAUCGUGGUCUUCAGCUGUCAGCAGCGUAGAGGCGAGCGGAAAUAUUUAUA
Kox-8-1 GAUUCGCCGCCUUUGAUGCGCUUUCGUGUAGCAUAAAUAUUUACCCGGUAGUUAUUCGCCGGGAAAUAUUUAACA
Esp-29-1 UCAGUUUGCAUACGUGGUAUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAAAAGAAUAUACAUAACA
Ror-1-1 UGUGCUUCGUGCAGCAUCAAAAAGCGUAUAUAUUUACCCUAGAUUCGCCAGCGGCGAAAGCUCAGCGGAAAUAUUUAACA
env-738 UGCAUACCGAGGUCAAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGCUUUUUGCAGCGUCAAAAUAUACAUAUAACA
Ecl-42-1 UCAGUUUGCAUACAGCGUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAGAAUAUACAUAUAACA
env-739 UUUGGUGCGCUUCGUGCAGCAUCAAAUAUUUACCCGGGUAUUCGCUUAGCGGAAUUCGCCGGGAAAUAUUUAACA
Rpl-1-1 UUUGGUGCGCUUCGUGCAGCAUCAAAUAUUUACCCGGGUAUUCGCUUAGCGGAAUUCGCCGGGAAAUAUUUAACA
Eca-3-1 UCAGUUUGCAUACCGUGUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAAAAGAAUAUACAUAACA
Kqu-1-1 UUAUACCGCAUUGAAGAUUGACCUAUCGUGGUCUUCAGCUGUACACAGCGUAGAGGGCGAGCGGAAAUAUACAUAUA
Esp-67-1 CAGUUUGCAUCCACCGAUGGAUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUCGCCAAAAGAAUAUACAUAUAACA
env-740 UUUGGUGCGCUUCGUGCAGCAUCAAAUAUUUACCCGGGUAUUCGCUUAGCGGAAUUCGCCGGGAAAUAUUUAACA
env-741 AUCAAACUCCAAAACCCGGGAAAUCGCUAAGCCGGUUUACGCCAGCUGCGGAAAGGUCGUGCGGAAAUAUUUAUA
env-742 UCAGUUUGCAUACCGCGGUAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAAAAGAAUAUACAUAACA
env-743 UUAUACCGCAUUGAAGAUUGACCUAUCGUGGUCUUCAGCUGUCAGCAGCGUAGAGGGCGAGCGGAAAUAUACAUAUA
env-754 CAGAUUGCAUCUGCGGUAUUAAAUCUGUAUGAUUCGCCGCCUUUUGAUGUAUUUUGCAUCAUCAUUUAUAUAACA
env-755A
env-756 UCAGUUUGCAUAGCCUGUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGGUGUAUUUACGCCAGAGAAUAUACAUAUAACA
Kcr-1-1 GUUUGCAUUCUGCGGUAUUUUCUGUAUGAUUCGCCGCCUUUUGAUGCAUUUUGGCAUAGGAAAUAUACAUAUAUAACA
Kas-1-1 AGUUUGCAUCGUGGUAUUAAAUCUGUAUGAUUCGCCGCCUUUUGAUGCAUUUUGUAUACUAGCAUUAUAUAUAACA
Fhe-1-1 AGUUUGCAUACGGCGUUUUUUUUUGUAUGAUUCGCCGCCUUUUGAUGGCAUUUUGCAUCAAACCUUUAUAUAUAACA
Fhe-2-1 AGUUUGCAUACGGCGUUUUUUUUUGUAUGAUUCGCCGCCUUUUGAUGGCAUUUUGCAUCAAACCUUUAUAUAUAACA
Fpu-1-1 GAUUUGCAUUGGGGUAUUUUUUUGUAUGAUUCGCCGCCUUUUGAUGGCAUUUUGCAUCAAACCUUUAUAUAUAACA
Fhe-3-1 AGUUUGCAUACGGCGUUUUUUUUUGUAUGAUUCGCCGCCUUUUGAUGGCAUUUUGCAUCAAACCUUUAUAUAUAACA
Fpu-5-1 GGUUUGCAUUGGGCGUUUUUUUUUGUAUGAUUCGCCGCCUUUUGAUGGCAUUUUGCAUCAAACCUUUAUAUAUAACA
Cne-1-1 UGCACCGGUGAGCAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGCAGUUUUGGUAUCAAACCUUUAUUUAUAACA
Cne-1-3 GCACCGGUGAGAAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGCAGUUUUGGUAUCAAACCUUUAUUUAUAACA
Cda-1-1 UGCACCGGAGGUAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGCAGUUUUGGUAUCAAACCUUUAUUUAUAACA
Sco-2-1 AUCCGGUGGUAUUUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGUUAUUUUGCGUUAAGCUCACAAAUAUACAUAUAACA
Bag-2-1 GCAUCCAUCGCCGGGUAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGCAGUUUUGGUGUAUCAAACCUUUAUUUAUAACA
Ebl-1-1 UGCACGGGCGGAAUCUCUGUAUUUUCGCCGCCUUUUGAUGCGCAGUUUUGCGCUUUAUUAUAUACAUAUAUAACA
Sen-311-1 UUUGCAUACAGAGGCAAAAUCUGUAUGAUUCGCCGCCUUUUGGUGGUGUUAUUGGCAUCAAACCUUUAUAUAUAACA
Sen-1013-1 UUUGCAUACGUGGUAUUUUUCUGUAUGAUUCGCCGCCUUUUGGUGGUGUUAUUGGCAUCAAACCUUUAUAUAUAACA
Sen-89-1 UUUGCAUACGUGGUAUUUUUCUGUAUGAUUCGCCGCCUUUUGGUGGUAUUGGCAUCAAACCUUUAUAUAUAACA
Sbo-3-1 UUUGCAUACGUGGUAUUUUUCUGUAUGAUUCGCCGCCUUUUGGUGGUAUUGGCAUCAAACCUUUAUAUAUAACA
Sen-1029-1 UUUGCAUACGUGGUAUUUUUCUGUAUGAUUCGCCGCCUUUUGGUGGUAUUGGCAUCAAACCUUUAUAUAUAACA
Sen-1021-1 UUUGCAUACGUGGUAUUUUUCUGUAUGAUUCGCCGCCUUUUGGUGGUAUUGGCAUCAAACCUUUAUAUAUAACA
Sen-312-1 UUUGCAUACGUGGUAUUUUUCUGUAUGAUUCGCCGCCUUUUGGUGGUAUUGGCAUCAAACCUUUAUAUAUAACA
Bag-1-1 GCAUCCAACGUGGGGUUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGCAGUUUUGGUAUCAAACCUUUAUUUAUAACA
env-757 CAGGGCGUUUUUUUCUGUAUGAUUCGCCGCCUUUUGGUGGUAUUGGCAUCAAACCUUUAUAUAUAACA
Cfr-3-1 GAUUUGGCAUAAAGACCAUUUACCCGAGAAUUUAAGCUGUUGAUGCAGUGUAAGGUGCAGGGGAAUUAUUUAACA
Ksp-3-1 UUUGCAUUCGUGGUAUUUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGUAUUCGCCGUGUAUAAAUAUACAUAUAACA
Eco-1011-1 AGUUUGCAUACGUGUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGAUAUUGAUGAUCUUAUUUAUAACA
env-758 AGUUUGCAUAGGCAAGGUAUUUUUCUGUAUGAUUCGCCGCCUUUUGAUAUCAAUUUUAUAUACUGACCUUAUUAUAACA
Eco-1781-1 AGUUUGCAUACGUGUUAAAUUUCUGUAUUUUUCGCCGCCUUUUGAUGCGAUAUUGAUGAUCUUAUUUAUAACA
Cam-1-1 GAUUUGCGCAAAAAGACCAUUUACCCGAGAUUUACCGGAGUUUACGCGUUGAUGCAGCGUAAAGGUGCAGGGGAAUUAUAUAACA
Sso-1-2 NNNNNNNNNNNNNNNNNNNNNNNNUGAUUCGCCGCCUUUUGAUGCGAUAUUGAUGAUCUUAUUUAUAACA
SH-70-1 AGUUUGCAUACGUGUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGUAUUGAUGAUCUUAUUUAUAACA
Ssp-20-2 CAUAGUGAAUAGUGACAGAGUGAUGAAGCAGGCAACGCAUCAGCAGUGUAAGGUGCAGGGGAAUUAUUUAACA
Eco-1460-1 AGUUUGCAUACGUGUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGAUAUUGAUGAUCUUAUUUAUAACA
env-763 AGUUUGCAUUCGCCGUGUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGAUAUUGAUGAUCUUAUUUAUAACA
Cwe-1-1 GAUUUGCGCAAAAAGACCAUUUACCCGAGAAUUUAAGCUGUUGAUGCAGUGUAAGGUGCAGGGGAAUUAUUUAACA
Sso-1-3 NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCCUUCGUAUUGAUGAUCGUAUUGAUGAUCUUAUUUAUAACA
env-766 AGUUUGCAUACGUGUUAAAUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGAUAUUGAUGAUCUUAUUUAUAACA
env-784 CAGUUUGCAUUCGCCGUGUAUUUUUCUGUAUGAUUCGCCGCCUUUUGAUGCGAUAUUGAUGAUCUUAUUUAUAACA

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Cva-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Corynebacteriaceae	<i>Corynebacterium variabile</i> DSM 44702
Tot-1-1	Bacteria	Actinobacteria	Actinobacteridae	Actinomycetales	Corynebacterineae	Corynebacteriaceae	<i>Turicella otitidis</i> ATCC 51513
[fl-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	Corynebacterium	[<i>Brevibacterium</i>] flavum
Cat-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium atypicum</i>	
Cau-2-1 to Cau-2-4	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium aurimucosum</i>	
Cau-3-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium auriscanis</i>	
Cca-1-1 to Cca-1-2	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium callunae</i> DSM 20147	
Cca-5-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium camporealensis</i>	
Cca-6-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium casei</i> LMG S-19264	
Ccr-2-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium crenatum</i>	
Cdi-18-1 to Cdi-18-2	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium diphtheriae</i>	
Cdi-19-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium diphtheriae</i> bv. <i>gravis</i> str. ISS 4060	
Cdi-20-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium diphtheriae</i> bv. <i>gravis</i> str. ISS 4746	
Cdi-21-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium diphtheriae</i> bv. <i>gravis</i> str. ISS 4749	
Cdi-22-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium diphtheriae</i> bv. <i>mitis</i> str. ISS 3319	
Cdo-1-1 to Cdo-1-2	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium doosanense</i> CAU 212 = DSM 45436	
Cep-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium epidermidicanis</i>	
Cfa-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium falsenii</i>	
Cfa-2-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium falsenii</i> DSM 44353	
Cfr-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium freneyi</i> DNF00450	
Cgl-11-1 to Cgl-11-3	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium glutamicum</i>	
Cgl-12-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium glutamicum</i> ATCC 14067	
Cgl-13-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium glyciniphilum</i> AJ 3170	
Cha-2-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium halotolerans</i>	
Cha-1-1 to Cha-1-2	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium halotolerans</i> YIM 70093 = DSM 44683	
Chu-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium humireducens</i> NBRC 106098 = DSM 45392	
Cih-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium ihumii</i>	
Cim-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium imitans</i>	
Cje-3-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium jeddahense</i>	
Cje-4-1 to Cje-4-18	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium jeikeium</i>	
Cku-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium kutscheri</i>	
Cla-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium lactis</i> RW2-5	
Cma-6-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium marinum</i> DSM 44953	
Cmi-1-1 to Cmi-1-2	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium minutissimum</i>	
Cmu-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium mustelae</i>	
Cpi-2-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium pilosum</i>	
Cpr-2-1 to Cpr-2-3	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium propinquum</i>	
Cps-16-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium pseudodiphtheriticum</i> DSM 44287	
Cps-17-1 to Cps-17-9	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium pseudotuberculosis</i>	
Cps-18-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium pseudotuberculosis</i> 258	
Cps-19-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium pseudotuberculosis</i> 31	
Cre-2-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium renale</i>	
Cri-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium riegeli</i>	
Csi-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium singulare</i>	
Csp-18-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium</i> sp. ATCC 6931	
Csp-19-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium sputi</i> DSM 45148	
Cst-2-1 to Cst-2-8	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium striatum</i>	
Cte-2-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium testudinoris</i>	
Cti-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium timonense</i> 5401744	
Ctu-2-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium tuscaniense</i> DNF00037	
Cul-6-1 to Cul-6-4	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium ulcerans</i>	
Cul-7-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium ulcerans</i> FRC11	
Cul-8-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium ulcerans</i> FRC58	
Cur-3-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium urealyticum</i>	
Cur-4-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium ureicelerivorans</i>	
Cut-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium uterequi</i>	
Cvi-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium vitaeruminis</i>	
Cvi-2-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium vitaeruminis</i> DSM 20294	
Cvi-3-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium vitaeruminis</i> Ga6A13	
Cxe-1-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium xerosis</i>	
Tot-2-1	Bacteria	Actinobacteria	Corynebacteriales	Corynebacteriales	Corynebacteriaceae	<i>Turicella otitidis</i>	
env-1 to env-159	environmental samples						

13.2 Gene contexts

Each L31-Corynebacteriaceae RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one L31-Corynebacteriaceae RNA are assigned a color; other domains are gray. Information about these conserved

domains is given in Section 13.3. The accession of the sequence containing each L31-Corynebacteriaceae RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each L31-Corynebacteriaceae RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 13.1.

abbrev.	Seq. accession		5′ at	3′ at	genes
Cut-1-1	NZ_CP011546.1	+	713235	713316	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cfa-1-1	NZ_JVKJ01000005.1	-	667570	667497	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cau-3-1	NZ_JRVJ01000003.1	+	120589	120653	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ hypo→ hypo→
Tot-2-1	NZ_LBNF01000055.1	-	8790	8700	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Tot-1-1	NZ_JH815193.1	-	531899	531809	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cnu-1-1	NZ_AFIZ01000013.1	-	97797	97736	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-13-1	NZ_CP006842.1	+	1057041	1057122	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cte-1-1	NC_021663.1	-	1923752	1923653	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cva-1-1	NC_015859.1	-	2360714	2360640	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-16-1	NZ_JIAH01000006.1	+	56886	57003	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Csp-14-1	NZ_KI515715.1	-	2247633	2247516	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Csp-13-1	NZ_KI515718.1	+	60683	60800	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
env-1	SRS053437_C431471	-	1608	1491	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
env-2	SRS013876_WUGC_scaffold_993	-	41899	41782	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-1-1	NZ_AVFF01000012.1	-	4417	4300	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
env-3	SRS017044_C179127	+	297	403	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cpr-2-1	NZ_JVVY01000068.1	+	69983	70089	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cpr-1-1	NZ_AQXC01000010.1	+	64394	64500	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
env-4	SRS047254_WUGC_scaffold_9884	+	208	314	RNA→
env-5	SRS015752_C119743	+	276	382	RNA→
Cpr-2-2	NZ_JVSI01000039.1	-	39215	39109	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cpr-2-3	NZ_JVSN01000024.1	-	56709	56603	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cfa-2-1	NZ_CP007156.1	-	2014629	2014563	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cre-1-1	NC_015673.1	-	1990937	1990874	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cje-2-1	NC_007164.1	-	1807476	1807415	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cje-4-1	NZ_JFCM01000017.1	-	3528	3467	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cje-4-2	NZ_JFCO01000025.1	+	54212	54273	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cje-4-3	NZ_JFCR01000012.1	-	86567	86506	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cje-4-4	NZ_JUNC01000013.1	-	142683	142622	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cje-1-1	NZ_GG700814.1	-	359951	359890	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cje-4-5	NZ_JFCH01000061.1	+	41014	41075	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cje-4-6	NZ_JFCQ01000001.1	-	319495	319435	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cje-4-7	NZ_JFCL01000010.1	-	81768	81708	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cje-4-8	NZ_JFCF01000035.1	+	36866	36926	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cje-4-9	NZ_JFCG01000013.1	-	140206	140146	RNA→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→ rpmF (PRK01110)Ribosomal_L32p (pfam01783)→

Cje-4-10	NZ_JFCI01000035.1	+	37385	37445	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cje-4-11	NZ_JFCJ01000077.1	-	132850	132790	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cje-4-12	NZ_JFCN01000025.1	+	2814	2874	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cje-4-13	NZ_JFCCK01000168.1	-	59670	59610	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cje-4-14	NZ_JFCPP01000015.1	-	88000	87940	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cur-2-1	NC_020230.1	+	634362	634421	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cur-1-1	NC_010545.1	+	654798	654857	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-18-1	NZ_JRUZ01000001.1	-	346898	346839	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-18-2	NZ_JZUJ01000002.1	+	4530	4589	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-19-1	NZ_JAQN01000016.1	+	59508	59567	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-22-1	NZ_JAQO01000007.1	+	59841	59900	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-5-1	NC_016785.1	+	776418	776477	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-16-1	NZ_AJGI01000001.1	-	267143	267084	RNA → PriB (COG2965) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-1-1	NC_016782.1	+	774515	774574	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-9-1	NC_016787.1	+	789776	789835	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-2-1	NC_016799.1	+	854037	854096	RNA → PriB (COG2965) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-11-1	NC_016783.1	+	770903	770962	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-7-1	NC_016786.1	+	774486	774545	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-13-1	NC_016789.1	+	835204	835263	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-4-1	NC_016801.1	+	781925	781984	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-12-1	NC_002935.2	+	826926	826985	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-3-1	NC_016800.1	+	806019	806078	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-8-1	NC_016802.1	+	795035	795094	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-6-1	NZ_AUZN01000046.1	+	17970	18029	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-15-1	NZ_AJVH01000012.1	+	61533	61592	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-20-1	NZ_JAQP01000015.1	+	32179	32238	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-21-1	NZ_JAQQ01000010.1	+	32192	32251	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-10-1	NC_016788.1	+	799786	799845	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-14-1	NC_016790.1	+	767184	767243	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdi-17-1	NZ_AUZO01000012.1	+	32203	32262	RNA → hypo → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cca-4-1	NZ_KB903376.1	+	440662	440743	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cgl-2-1	NZ_GG667130.1	+	67973	68043	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cgl-1-1	NZ_GG667038.1	+	72480	72550	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cpy-1-1	NZ_KE150446.1	+	69361	69419	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cre-2-1	NZ_LDYE01000007.1	+	45841	45903	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdo-1-2	NZ_CP006764.1	+	832115	832176	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cdo-1-1	NZ_AQUX01000004.1	-	131828	131767	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cca-5-1	NZ_CP011311.1	+	791325	791385	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cma-3-1	NZ_AQXB01000007.1	-	161751	161703	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cmi-1-1	NZ_JSEF01000008.1	+	14324	14454	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cau-1-1	NC_012590.1	+	901957	902077	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cmi-1-2	NZ_LAYQ01000001.1	-	68637	68555	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →

Cau-2-1	NZ_JUMN01000003.1	+	19608	19690	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csi-1-1	NZ_CP010827.1	+	955732	955835	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cci-1-1	NZ_AQUW01000002.1	-	253907	253785	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cat-1-1	NZ_CP008944.1	+	701875	702000	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cje-4-15	NZ_JUSD01000006.1	+	58418	58480	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-18-1	NZ_CP008913.1	-	697524	697462	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cje-4-16	NZ_JVOW01000015.1	-	32940	32878	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cje-4-17	NZ_JVIP01000011.1	+	50025	50087	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-1-1	NZ_KE150404.1	-	2427073	2427011	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cam-2-1	NZ_ABZU01000013.1	-	40816	40754	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cur-3-1	NZ_JWEP01000048.1	-	32027	31965	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cje-4-18	NZ_JVPT01000044.1	-	37181	37119	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cvi-1-1	NZ_JVVM01000020.1	-	305775	305713	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cla-1-1	NZ_CP006841.1	-	2125937	2125813	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-19-1	NZ_ATYV01000011.1	+	77096	77159	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) → DUF3887 (pfam13026) →
env-6	SRS016292_C136299	+	434	503	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-7	SRS047225_C235885	-	2784	2715	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-4-1	NZ_KI1515760.1	+	78324	78393	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-8	SRS017451_C217497	+	873	939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-9	SRS015937_WUGC_scaffold_1576	-	2210	2144	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-10	SRS019986_C257788	+	75	141	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-11	SRS058213_LANL_scaffold_5004	-	2005	1939	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cac-1-1	NZ_GG666998.1	+	69464	69530	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-15-1	NZ_KI1515712.1	+	921794	921860	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-17-1	NZ_KI1515704.1	+	80492	80558	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-16-1	NZ_KI1515710.1	-	418615	418549	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-12-1	NZ_KI1515719.1	+	80492	80558	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-12	SRS013876_WUGC_scaffold_1100	-	378	312	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
Cac-2-1	NZ_GL397138.1	+	875571	875637	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-13	SRS014682_WUGC_scaffold_5134	-	9672	9606	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-14	SRS014901_C267752	+	75	141	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-15	SRS017820_C151105	-	125	59	RNA → hypo →
env-16	SRS022006_Baylor_scaffold_3374	-	2342	2276	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-17	SRS047254_WUGC_scaffold_8049	-	515	449	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-6-1	NZ_KI1515749.1	+	937901	937967	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-18	SRS044474_LANL_scaffold_86	+	548	614	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-7-1	NZ_KI1515742.1	-	405839	405773	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-10-1	NZ_KI1515730.1	+	76326	76392	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-2-1	NZ_KI1515775.1	+	77719	77785	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cau-2-2	NZ_JVXO01000017.1	-	651	592	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-19	L_ear_crease_WUGL_scaffold_15403	+	353	412	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-20	SRS019015_C240949	+	347	406	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-21	SRS019063_C605280	-	264	205	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-22	SRS019867_C148862	-	188	129	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-23	SRS058213_LANL_scaffold_8330	-	1796	1737	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-11-1	NZ_KI1515722.1	-	400130	400071	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-9-1	NZ_KI1515731.1	-	2393670	2393611	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-5-1	NZ_KI1515752.1	+	62595	62654	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-8-1	NZ_KI1515735.1	+	1155727	1155786	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Csp-3-1	NZ_KI1515767.1	+	58512	58571	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-24	SRS054061_C156877	+	428	487	RNA →

env-25	SRS056906_LANL_scaffold_9004	-	11347	11278	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
env-26	SRS014682_C298104	+	265	334	RNA→		
Cau-2-3	NZ_JUZU01000034.1	+	26228	26285	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cau-2-4	NZ_JUOH01000050.1	-	648	591	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Ctu-1-1	NZ_ACVP01000016.1	+	27341	27398	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
						rpmF (PRK01110)Ribosomal_L32p (pfam01783)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-2-1	NZ_GL542875.1	-	416624	416567	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cst-2-1	NZ_LAYR01000011.1	+	31347	31452	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cst-2-2	NZ_JVTN01000092.1	-	89483	89378	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cst-2-3	NZ_JVTL01000033.1	-	36207	36102	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cst-2-4	NZ_JVBA01000054.1	+	47752	47857	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cst-2-5	NZ_JULW01000062.1	+	47806	47911	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cst-2-6	NZ_JULV01000025.1	+	47803	47908	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cst-2-7	NZ_JVCW01000084.1	+	75365	75470	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cst-1-1	NZ_GG667522.1	-	145531	145426	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cst-2-8	NZ_JUSN01000092.1	-	950	845	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
env-27	AglA_G_BVDVLI01BUUUY	-	106	52	RNA→	hypo→	
env-28	AglA_G_contig04927	-	168	114	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	
env-29	AglA_G_GDN60OX02HVGVM	+	158	212	RNA→		
env-30	AglA_G_GDN60OX02HYEDF	-	352	298	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	
Cur-4-1	NZ_CP009215.1	+	707148	707228	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cih-1-1	NZ_HG001322.1	+	57297	57372	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cha-2-1	NZ_JVMD01000015.1	+	131313	131426	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cfr-1-1	NZ_JRNE01000004.1	-	33488	33375	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
env-31	JGI24707J26582_10105430	+	592	705	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	
Cje-3-1	NZ_CBYN010000125.1	-	2960	2903	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cul-6-1	NZ_CP011095.1	+	738588	738694	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Ctu-2-1	NZ_JRNG01000018.1	-	53232	53172	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cim-1-1	NZ_CP009211.1	+	754015	754070	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cri-1-1	NZ_CP012342.1	-	1228345	1228290	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cge-1-1	NZ_CM000961.1	-	2235924	2235848	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cul-5-1	NZ_AQUY01000002.1	+	105764	105849	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cca-2-1	NZ_AQUV01000003.1	-	337464	337414	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
						REC (smart00448)Trans_reg_C (smart00862)OmpR (COG0745)→	Trans_reg_C (smart00862)OmpR (COG0745)→
						DegQ (COG0265)PDZ_2 (pfam13180)Trypsin_2 (pfam13365)→	
						DegQ (COG0265)PDZ_2 (pfam13180)Trypsin_2 (pfam13365)→	
						MoCF_biosynth (smart00852)MogA_MoaB (cd00886)→	
Cti-1-1	NZ_HE998586.1	-	222294	222239	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cli-1-1	NZ_GG667196.1	-	108598	108535	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-17-1	NZ_CP012022.1	+	703166	703274	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-12-1	NC_014329.1	+	696776	696884	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-13-1	NC_017303.1	+	696588	696696	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-15-1	NC_017305.1	+	696644	696752	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
						rpmF (PRK01110)Ribosomal_L32p (pfam01783)→	
Cps-8-1	NC_017306.1	+	696771	696879	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-6-1	NC_016781.1	+	696768	696876	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-14-1	NC_017031.1	+	696696	696804	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→
						rpmF (PRK01110)Ribosomal_L32p (pfam01783)→	
Cps-5-1	NC_017462.1	+	696591	696699	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-17-2	NZ_CP009927.1	+	696736	696844	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-9-1	NC_017301.1	+	696442	696550	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-4-1	NC_017300.1	+	696689	696797	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-17-3	NZ_CP008924.1	+	1234105	1234213	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→

Cps-17-4	NZ_CP008922.1	+	1250687	1250795	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cps-17-5	NZ_CP008923.1	-	345645	345537	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cps-17-6	NZ_CP010889.1	+	696683	696791	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cps-17-7	NZ_CP011474.1	+	696758	696866	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cps-17-8	NZ_CP010795.1	-	2156721	2156613	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cku-1-1	NZ_CP011312.1	-	1807067	1807007	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cam-1-1	NZ_GG771288.1	-	137801	137737	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cvi-2-1	NZ_CP004353.1	+	974041	974128	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cvi-3-1	NZ_JNKV01000010.1	+	35324	35411	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-32	JGI24707J26582.10216171	-	482	418	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cmu-1-1	NZ_CP011542.1	+	1034276	1034329	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cca-3-1	NZ_CAFW01000081.1	+	66998	67062	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
Cca-6-1	NZ_CP004350.1	-	2180252	2180188	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-33	2205737659	+	155	219	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-34	2158166148	+	155	219	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-35	Buccal_mucosa_LANL_scaffold.147023	+	1044	1107	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-36	SRS015064_C1740324	-	3475	3412	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-37	SRS017076_C2591228	-	210	147	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-38	SRS022602_Baylor_scaffold.15996	+	4561	4624	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-39	SRS023841_C1528757	-	216	153	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-40	SRS044366_C952506	+	2004	2067	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-41	SRS053630_LANL_scaffold.21375	-	55473	55410	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-42	Subgingival_plaque_LANL_C11219698	-	389	326	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-43	SRS011098_Baylor_scaffold.21411	-	9309	9246	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-44	SRS011152_Baylor_scaffold.27991	+	1045	1108	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-45	SRS011343_C2262393	+	14035	14098	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-46	SRS012285_Baylor_scaffold.4751	+	7940	8003	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-47	SRS013170_Baylor_scaffold.53613	-	476	413	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-48	SRS013533_C5500247	+	357	420	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110) →
env-49	SRS013723_Baylor_scaffold.39673	+	2404	2467	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-50	SRS013836_C4755765	+	181	244	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-51	SRS013949_WUGC_scaffold.27456	-	199	136	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-52	SRS013950_C2187510	+	1205	1268	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-53	SRS014107_C1342401	-	235	172	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-54	SRS014473_C1089635	+	295	358	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-55	SRS014476_WUGC_scaffold.41168	-	1375	1312	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-56	SRS014477_C1645642	-	1867	1804	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-57	SRS014578_WUGC_scaffold.44820	+	551	614	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-58	SRS014690_C1892883	-	401	338	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-59	SRS014691_WUGC_scaffold.10572	+	275	338	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-60	SRS014894_WUGC_scaffold.28738	+	22786	22849	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-61	SRS015044_C2942561	+	357	420	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-62	SRS015060_C1560553	+	198	261	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-63	SRS015063_WUGC_scaffold.11905	+	3939	4002	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110) →
env-64	SRS015158_WUGC_scaffold.58214	+	860	923	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-65	SRS015215_WUGC_scaffold.18972	+	1864	1927	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-66	SRS015278_WUGC_scaffold.11862	-	58024	57961	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-67	SRS015378_WUGC_scaffold.7793	+	1275	1338	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-68	SRS015440_WUGC_scaffold.49340	-	2220	2157	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-69	SRS015470_WUGC_scaffold.45392	-	1480	1417	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-70	SRS015574_WUGC_scaffold.2816	+	74953	75016	RNA	→ rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →

env-71	SRS015755_WUGC_scaffold_44984	+	1196	1259	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-72	SRS015989_WUGC_scaffold_32775	-	5102	5039	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-73	SRS016043_WUGC_scaffold_12513	-	56767	56704	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-74	SRS016200_WUGC_scaffold_38664	-	3995	3932	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-75	SRS016360_Baylor_scaffold_23915	-	10968	10905	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-76	SRS016575_Baylor_scaffold_1786	-	7196	7133	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-77	SRS016746_Baylor_scaffold_72724	+	7808	7871	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-78	SRS017025_Baylor_scaffold_19305	-	682	619	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-79	SRS017227_C5283816	+	851	914	RNA → ←-hypo
env-80	SRS017445_Baylor_scaffold_45380	-	6544	6481	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-81	SRS017511_Baylor_scaffold_42338	+	1176	1239	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-82	SRS017687_C884952	+	126	189	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-83	SRS018337_C2391064	+	863	926	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-84	SRS018573_WUGC_scaffold_24099	-	238	175	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-85	SRS018665_WUGC_scaffold_21586	-	2301	2238	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-86	SRS019025_WUGC_scaffold_5953	-	310	247	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-87	SRS019028_WUGC_scaffold_36029	-	523	460	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-88	SRS019029_C3309553	+	2423	2486	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-89	SRS019128_WUGC_scaffold_42508	+	1205	1268	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-90	SRS019129_WUGC_scaffold_20241	-	3656	3593	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-91	SRS019225_WUGC_scaffold_23108	+	4861	4924	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-92	SRS019333_C1208867	+	219	282	RNA →
env-93	SRS019387_WUGC_scaffold_16046	+	3939	4002	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-94	SRS019591_WUGC_scaffold_40585	+	1176	1239	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-95	SRS019906_WUGC_scaffold_28644	-	3887	3824	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-96	SRS019980_Baylor_scaffold_30280	-	2562	2499	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-97	SRS020220_C3511826	+	271	334	RNA → ←-hypo
env-98	SRS020226_Baylor_scaffold_55927	-	3611	3548	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-99	SRS020334_C2557741	+	249	312	RNA →
env-100	SRS020862_Baylor_scaffold_27689	-	8855	8792	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-101	SRS021477_Baylor_scaffold_22850	-	15915	15852	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-102	SRS021960_Baylor_scaffold_7131	-	2351	2288	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-103	SRS022083_Baylor_scaffold_11512	-	55855	55792	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-104	SRS022149_LANL_scaffold_20816	+	1063	1126	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-105	SRS022536_LANL_scaffold_114388	-	1321	1258	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-106	SRS022725_LANL_scaffold_19220	+	1891	1954	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-107	SRS023358_C3452087	-	361	298	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-108	SRS023538_C1310182	-	1371	1308	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-109	SRS023595_Baylor_scaffold_84979	+	919	982	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110) →
env-110	SRS023938_Baylor_scaffold_15844	-	12477	12414	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-111	SRS023964_Baylor_scaffold_34977	+	1176	1239	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-112	SRS024021_Baylor_scaffold_16881	+	11059	11122	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-113	SRS024087_LANL_scaffold_41039	-	238	175	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) →
env-114	SRS024289_LANL_scaffold_12931	-	91217	91154	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-115	SRS024381_C2286130	+	294	357	RNA →
env-116	SRS024447_LANL_scaffold_37014	-	3896	3833	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-117	SRS024561_LANL_scaffold_31049	+	1456	1519	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-118	SRS024649_LANL_scaffold_19762	-	2266	2203	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-119	SRS042984_LANL_scaffold_1303	-	1490	1427	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-120	SRS043018_WUGC_scaffold_35426	+	991	1054	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-121	SRS043772_WUGC_scaffold_25647	+	1553	1616	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →
env-122	SRS047100_WUGC_scaffold_20208	+	1176	1239	RNA → rpmE2 (PRK01678)Ribosomal_L31 (pfam01197) → rpmF (PRK01110)Ribosomal_L32p (pfam01783) →

env-123	SRS049268.LANL_scaffold_56284	+	1050	1113	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-124	SRS049318.LANL_scaffold_74226	+	1275	1338	RNA → ←hypo
env-125	SRS051244.LANL_scaffold_15573	-	9216	9153	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-126	SRS051378.LANL_scaffold_28522	-	3634	3571	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-127	SRS051930.LANL_scaffold_9996	-	7943	7880	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-128	SRS052604.LANL_scaffold_15789	-	3462	3399	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-129	SRS052876.LANL_scaffold_11131	-	4560	4497	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-130	SRS054430.LANL_scaffold_8962	-	182	119	RNA → ←hypo
env-131	SRS054653.LANL_scaffold_17280	-	2173	2110	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-132	SRS055378.LANL_scaffold_71521	+	1515	1578	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-133	SRS055401.LANL_scaffold_40435	+	268	331	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-134	SRS055450.LANL_scaffold_48342	-	746	683	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-135	SRS058053.LANL_scaffold_20722	-	3271	3208	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-136	SRS058808.LANL_scaffold_76023	-	908	845	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-137	SRS063215.C2240857	+	181	244	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-138	SRS063932.C3715652	-	110	47	RNA → hypo →
env-139	SRS063999.C3497605	+	134	197	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) →
env-140	SRS065099.LANL_scaffold_2670	+	5358	5421	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-141	SRS065310.LANL_scaffold_16984	-	1076	1013	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
Cma-4-1	NZ_ACSH02000008.1	-	471190	471127	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
Cma-5-1	NZ_EQ973332.1	-	470329	470266	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) → hypo → REC (smart00448)Trans_reg_C (smart00862)OmpR (COG0745) → HAMP (smart00304)HATPase_c (smart00387)HisKA (smart00388)BaeS (COG0642) →
env-142	SRS017139.Baylor_scaffold_46230	+	1104	1167	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-143	SRS024318.LANL_scaffold_64348	-	95	32	RNA → hypo →
env-144	SRS015803.WUGC_scaffold_47328	-	8195	8132	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-145	SRS018394.Baylor_scaffold_43567	+	1126	1189	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) →
env-146	SRS019077.C2525265	-	265	202	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) →
env-147	SRS022719.LANL_scaffold_10847	-	240	177	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) →
env-148	SRS045049.C1493001	+	93	156	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) →
env-149	SRS045197.C3343939	+	181	244	RNA → rpmE (PRK00019)rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) →
env-150	SRS047634.LANL_scaffold_108263	+	2234	2297	RNA →
env-151	SRS051941.LANL_scaffold_38428	+	2568	2631	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-152	SRS053584.LANL_scaffold_32609	+	521	584	RNA →
env-153	SRS064449.LANL_scaffold_23248	+	2184	2247	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-154	SRS017304.Baylor_scaffold_4558	-	5996	5933	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-155	SRS024144.C1817014	-	4955	4892	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-156	SRS053917.LANL_scaffold_4723	-	52992	52939	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
Cma-1-1	NC_021915.1	+	861557	861618	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
Cxe-1-1	NZ_LAYS01000015.1	-	47956	47840	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
Chu-1-1	NZ_CP005286.1	+	766188	766271	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-157	JGI24707J26582.10124387	-	594	528	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
env-158	JGI24708J26588.10046528	-	1384	1318	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) → REC (smart00448)Trans_reg_C (smart00862)OmpR (COG0745) →
Cte-2-1	NZ_CP011545.1	+	759300	759365	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
Cma-2-1	NZ_ATVG01000004.1	-	122985	122912	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) →
Cma-6-1	NZ_CP007790.1	+	691873	691940	RNA → rpmE2 (PRK01678)Ribosomal.L31 (pfam01197) → rpmF (PRK01110)Ribosomal.L32p (pfam01783) → REC (smart00448)Trans_reg_C (smart00862)OmpR (COG0745) → HAMP (smart00304)HATPase_c (smart00387)HisKA (smart00388)BaeS (COG0642) → DegQ (COG0265)PDZ_2 (pfam13180)Trypsin_2 (pfam13365) → DegQ (COG0265)PDZ_2 (pfam13180)Trypsin_2 (pfam13365) → MoCF_biosynth (smart00852)MogA.MoaB (cd00886) → hypo →

env-159	JGI24499J29688_1051025	+	20	74	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	
Cef-1-1	NC_004369.1	+	1007841	1007895	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cul-3-1	NC_015683.1	+	772809	772915	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cul-1-1	NC_018101.1	+	844033	844139	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cul-2-1	NC_017317.1	+	770052	770158	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cul-6-2	NZ_CP009583.1	+	759297	759403	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cul-6-3	NZ_CP009500.1	+	756232	756338	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cul-8-1	NZ_CP011913.1	+	800557	800663	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cul-6-4	NZ_CP009716.1	+	764195	764301	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cul-7-1	NZ_CP009622.1	+	751173	751279	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cul-4-1	NZ_AYUJ01000003.1	+	75253	75359	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cca-1-1	NC_020506.1	+	891721	891777	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cca-1-2	NZ_ATVVF01000011.1	+	57211	57267	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cha-1-1	NC_020302.1	+	926392	926485	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cha-1-2	NZ_JIAJ01000009.1	-	52009	51916	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cpi-2-1	NZ_LDYD01000009.1	+	112150	112215	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cpi-1-1	NZ_KB892441.1	-	29289	29354	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Clu-1-1	NZ_KB902226.1	-	119258	119193	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cep-1-1	NZ_CP011541.1	+	815491	815557	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-10-1	NC_017307.1	+	688204	688312	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-3-1	NC_017308.1	+	675056	675164	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-7-1	NC_016932.1	+	685279	685387	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-17-9	NZ_CP012136.1	+	720478	720586	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-11-1	NC_018019.1	+	680119	680227	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-18-1	NC_017945.2	+	720561	720669	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cps-19-1	NC_017730.2	+	745407	745515	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-3-1	NC_003450.3	+	927407	927462	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-7-1	NZ_AFYA01000024.1	+	65956	66011	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-6-1	NC_009342.1	+	1091957	1092012	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-4-1	NC_020519.1	+	927406	927461	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-9-1	NC_021352.1	+	1128888	1128943	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-8-1	NC_021351.1	+	1128889	1128944	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-5-1	NC_022040.1	+	930302	930357	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-11-1	NZ_CP010451.1	+	991151	991206	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-11-2	NZ_CP007722.1	+	1016675	1016730	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-11-3	NZ_CP007724.1	+	985858	985913	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-3-2	NC_006958.1	+	928877	928932	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
[fl-1-1	NZ_CP011309.1	+	983067	983122	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-10-1	NZ_AKXP01000016.1	+	65984	66039	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Cgl-12-1	NZ_AGQQ02000002.1	+	1168400	1168455	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Ccr-2-1	NZ_JPDH01000040.1	-	9017	8962	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→
Ccr-1-1	NZ_AQPS01000045.1	+	65984	66039	RNA→	rpmE2 (PRK01678)Ribosomal_L31 (pfam01197)→	rpmF (PRK01110)Ribosomal_L32p (pfam01783)→

13.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 13.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one L31-

Corynebacteriaceae RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 13.2.

cd00886 (2) MogA_MoaB family.
COG0265 (4) Periplasmic serine protease, S1-C subfamily, contain C-terminal PDZ domain [Posttranslational modification, protein turnover, chaperones]
COG0642 (2) Signal transduction histidine kinase [Signal transduction mechanisms]
COG0745 (5) DNA-binding response regulator, OmpR family, contains REC and winged-helix (wHTH) domain [Signal transduction mechanisms, Transcription]
COG2965 (2) Primosomal replication protein N [Replication, recombination and repair]
pfam01197 (353) Ribosomal protein L31.
pfam01783 (313) Ribosomal L32p protein family.
pfam13026 (1) Protein of unknown function (DUF3887).
pfam13180 (4) PDZ domain.

pfam13365 (4) Trypsin-like peptidase domain.
PRK00019 (1) 50S ribosomal protein L31; Reviewed
PRK01110 (316) 50S ribosomal protein L32; Validated
PRK01678 (353) 50S ribosomal protein L31 type B; Reviewed
smart00304 (2) HAMP (Histidine kinases, Adenylyl cyclases, Methyl binding proteins, Phosphatases) domain.
smart00357 (2) Histidine kinase-like ATPases.
smart00383 (2) His Kinase A (phosphoacceptor) domain.
smart00448 (4) cheY-homologous receiver domain.
smart00852 (2) Probable molybdopterin binding domain.
smart00862 (5) Transcriptional regulatory protein, C terminal.

13.4 Multiple-sequence alignment

Each L31-Corynebacteriaceae RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 13.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The L31-Corynebacteriaceae RNA itself is denoted by the line underneath marked 5’ and 3’ on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded green. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-

Crick or G-U pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, red nucleotides: nucleotide identity conserved more than 97% of the time, black nucleotides: 90%, gray nucleotides: 75%, red circle (◉): nucleotide is present 97% of the time, black circle (◐): 90%, gray circle (◑): 75%, white circle (◒): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Cac-1-1, Cac-2-1, Cau-2-4, Cca-1-2, Ccr-1-1, Ccr-2-1, Cdi-1-1, Cdi-10-1, Cdi-11-1, Cdi-12-1, Cdi-13-1, Cdi-14-1, Cdi-16-1, Cdi-17-1, Cdi-18-2, Cdi-19-1, Cdi-2-1, Cdi-21-1, Cdi-22-1, Cdi-3-1, Cdi-4-1, Cdi-5-1, Cdi-6-1, Cdi-7-1, Cdi-8-1, Cdi-9-1, Cdo-1-1, Cgl-10-1, Cgl-11-1, Cgl-11-2, Cgl-11-3, Cgl-12-1, Cgl-3-2, Cgl-4-1, Cgl-5-1, Cgl-6-1, Cgl-7-1, Cgl-8-1, Cgl-9-1, Cha-1-2, Cje-4-1, Cje-4-10, Cje-4-12, Cje-4-14, Cje-4-17, Cje-4-18, Cje-4-2, Cje-4-7, Cje-4-9, Cma-4-1, Cma-5-1, Cpi-1-1, Cpr-1-1, Cpr-2-1, Cpr-2-3, Cps-1-1, Cps-11-1, Cps-13-1, Cps-14-1, Cps-15-1, Cps-17-2, Cps-17-3, Cps-17-4, Cps-17-5, Cps-17-6, Cps-17-7, Cps-17-8, Cps-17-9, Cps-18-1, Cps-19-1, Cps-2-1, Cps-3-1, Cps-4-1, Cps-5-1, Cps-6-1, Cps-7-1, Cps-8-1, Cps-9-1, Csp-1-1, Csp-10-1, Csp-11-1, Csp-12-1, Csp-13-1, Csp-15-1, Csp-16-1, Csp-17-1, Csp-18-1, Csp-2-1, Csp-3-1, Csp-4-1, Csp-5-1, Csp-9-1, Cst-1-1, Cst-2-2, Cst-2-3, Cst-2-4, Cst-2-5, Cst-2-6, Cst-2-7, Cul-1-1, Cul-4-1, Cul-6-3, Cul-8-1, Cvi-3-1, Tot-1-1, [fl-1-1, env-10, env-100, env-101, env-102, env-103, env-104, env-105, env-106, env-107, env-108, env-109, env-11, env-110, env-111, env-112, env-113, env-114, env-115, env-116, env-117, env-118, env-119, env-120, env-121, env-122, env-123, env-124, env-125, env-126, env-127, env-128, env-129, env-130, env-131, env-132, env-133, env-134, env-135, env-136, env-137, env-138, env-139, env-140, env-141, env-143, env-145, env-146, env-147, env-148, env-149, env-15, env-150, env-151, env-152, env-153, env-155, env-158, env-16, env-20, env-21, env-22, env-23, env-26, env-28, env-34, env-36, env-37, env-38, env-39, env-40, env-41, env-42, env-43, env-44, env-45, env-46, env-47, env-48, env-49, env-50, env-51, env-52, env-53, env-54, env-55, env-56, env-57, env-58, env-59, env-60, env-61, env-62, env-63, env-64, env-65, env-66, env-67, env-68, env-69, env-7, env-70, env-71, env-72, env-73, env-74, env-75, env-76, env-77, env-78, env-79, env-80, env-81, env-82, env-83, env-84, env-85, env-86, env-87, env-88, env-89, env-90, env-91, env-92, env-93, env-94, env-95, env-96, env-97, env-98, env-99

Pgu-2-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Porphyromonadaceae	<i>Porphyromonas gulae</i> DSM 15663
Psp-1-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Porphyromonadaceae	<i>Porphyromonas</i> sp. COT-239 OH1446
Psp-2-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Porphyromonadaceae	<i>Porphyromonas</i> sp. COT-290 OH860
Psp-3-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Porphyromonadaceae	<i>Porphyromonas</i> sp. oral taxon 278 str. W7784
Pac-1-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Porphyromonadaceae	<i>Proteiniphilum acetatigenes</i> DSM 18083
Pxy-1-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae	<i>Paraprevotella xyliniphila</i> YIT 11841
Psp-4-1	Bacteria Bacteroidetes Bacteroidia Bacteroidales Prevotellaceae	<i>Prevotella</i> sp. 10(H)
env-1 to env-517	environmental samples	

14.2 Gene contexts

Each S4-Bacteroidia RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one S4-Bacteroidia RNA are assigned a color; other domains are gray. Information about these conserved

domains is given in Section 14.3. The accession of the sequence containing each S4-Bacteroidia RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each S4-Bacteroidia RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 14.1.

abbrev.	Seq. accession	5′ at	3′ at	genes	
env-1	SRS023468_C1206091	+	582	641	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-2	DLM014_scaffold9702_6	-	4201	4154	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→
env-3	Buccal_mucosa_LANL_scaffold_41001	-	950	892	RNA→ RpsD (COG0522)rpsD (PRK05327)→ PRK05182 (PRK05182)RNA_pol_L (pfam01193)→
env-4	SRS017127_Baylor_scaffold.6196	+	1625	1683	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-5	SRS018149_Baylor_scaffold.12321	-	2101	2043	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-6	SRS023964_C2539807	-	564	506	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-7	SRS011310_Baylor_scaffold.16376	-	5774	5716	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-8	SRS065310_C1361795	+	968	1026	RNA→ RpsD (COG0522)rpsD (PRK05327)→ PRK05182 (PRK05182)RNA_pol_L (pfam01193)→
env-9	SRS055378_LANL_scaffold_29718	+	311	362	RNA→ ←-hypo
env-10	SRS075410_LANL_scaffold_50382	+	626	687	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)→
env-11	SRS016043_WUGC_scaffold.3810	+	4122	4183	RNA→ RpsD (COG0522)rpsD (PRK05327)→ PRK05182 (PRK05182)RNA_pol_L (pfam01193)→
env-12	SRS017227_Baylor_scaffold.151231	+	598	656	RNA→ ←-hypo
Pca-1-1	NZ_JDF01000008.1	+	98648	98709	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-13	SRS023841_C1551522	-	144	93	RNA→ ←-hypo
env-14	SRS011255_Baylor_scaffold.64659	+	946	1007	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-15	SRS022602_Baylor_scaffold.70156	+	694	755	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-16	SRS011343_Baylor_scaffold.39133	+	5921	5982	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→

env-17	SRS011126_Baylor_scaffold_62966	+	893	954	RNA → ←hypo
env-18	SRS020226_Baylor_scaffold_54603	+	798	857	RNA → ←hypo
env-19	SRS015574_WUGC_scaffold_12528	-	913	852	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_poLL (pfam01193) →
env-20	SRS015989_C2177697	+	1102	1163	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-21	SRS017511_Baylor_scaffold_65931	+	476	535	RNA → ←hypo
env-22	SRS015899_C1784559	-	159	98	RNA → ←hypo
env-23	SRS063999_LANL_scaffold_63196	-	141	90	RNA → ←hypo
env-24	SRS023964_C2553979	-	311	250	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-25	SRS049389_WUGC_scaffold_5829	-	2425	2364	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-26	SRS049268_LANL_scaffold_58337	+	435	493	RNA →
env-27	SRS050029_WUGC_scaffold_1469	+	6482	6543	RNA → ←hypo
env-28	SRS050628_C1841465	-	367	306	RNA → ←hypo
Psp-3-1	NZ_KI259258.1	+	268982	269043	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-29	SRS017808_C3810014	+	216	277	RNA → ←hypo
env-30	SRS017810_C1297543	-	2305	2244	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-31	SRS022719_C2873881	+	69	130	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-32	SRS018157_Baylor_scaffold_50143	+	336	394	RNA →
env-33	SRS022077_Baylor_scaffold_39462	+	1738	1799	RNA → ←hypo
env-34	SRS019980_Baylor_scaffold_49109	+	185	246	RNA → ←hypo
env-35	SRS019122_C5826086	+	224	285	RNA → ←hypo
env-36	SRS011098_Baylor_scaffold_35155	+	393	454	RNA →
env-37	SRS064329_LANL_scaffold_22656	-	2368	2307	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-38	SRS011243_Baylor_scaffold_40900	+	7069	7130	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-39	SRS023938_Baylor_scaffold_61057	+	322	380	RNA →
env-40	SRS013711_C1768261	-	1026	965	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_poLL (pfam01193) →
env-41	SRS047100_C2068538	+	529	590	RNA →
env-42	SRS016575_Baylor_scaffold_31788	+	726	784	RNA →
env-43	SRS017227_Baylor_scaffold_36455	-	153	95	RNA → hypo →
env-44	SRS054569_LANL_scaffold_25042	+	6465	6526	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-45	SRS015985_WUGC_scaffold_33109	+	1425	1486	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-46	SRS016569_Baylor_scaffold_10142	+	7054	7115	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-47	SRS062878_LANL_scaffold_84002	+	2264	2325	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-48	SRS043663_LANL_scaffold_33609	+	3838	3899	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →

env-49	SRS017814_Baylor_scaffold_28373	+	1124	1185	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-50	SRS022725_LANL_scaffold_46531	+	399	460	RNA → ←-hypo
env-51	SRS016200_WUGC_scaffold_48533	+	1527	1588	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-52	Palatine_Tonsils_LANL_C6173648	+	416	469	RNA →
env-53	SRS063932_LANL_scaffold_17762	-	154	95	RNA →
env-54	SRS048411_C6928200	-	302	241	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-55	SRS013164_Baylor_scaffold_10065	+	5429	5490	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_poL_L (pfam01193) →
env-56	SRS015941_C3521747	-	131	80	RNA →
env-57	SRS017139_Baylor_scaffold_54946	-	310	249	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-58	SRS016600_C812171	+	234	295	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-59	SRS016746_Baylor_scaffold_51447	-	792	731	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-60	SRS055378_LANL_scaffold_10432	-	143	92	RNA →
env-61	SRS017439_Baylor_scaffold_45491	+	416	477	RNA → ←-hypo
env-62	SRS049147_LANL_scaffold_12273	-	2261	2200	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-63	SRS013881_WUGC_scaffold_12223	-	5093	5032	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-64	SRS012279_Baylor_scaffold_38188	+	6346	6407	RNA → ←-hypo
env-65	SRS044662_C1620928	+	41	102	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-66	SRS011310_Baylor_scaffold_13983	+	2829	2890	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-67	SRS024355_LANL_scaffold_34750	-	442	381	RNA → S4 (smart00363)RpsD (COG0522) →
env-68	SRS024381_C2388111	-	313	252	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-69	SRS042131_WUGC_scaffold_5469	-	6250	6189	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-70	SRS011306_Baylor_scaffold_188	-	2407	2346	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-71	SRS011126_Baylor_scaffold_20302	-	154	95	RNA →
env-72	SRS011140_Baylor_scaffold_48076	-	341	280	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-73	SRS013947_WUGC_scaffold_13455	-	2590	2529	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-74	SRS075404_C3684462	+	624	685	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-75	SRS013946_WUGC_scaffold_140	-	21413	21352	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-76	SRS014124_WUGC_scaffold_61000	+	4884	4945	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-77	SRS022602_Baylor_scaffold_69535	+	758	816	RNA →
env-78	SRS043422_C2652059	-	166	104	RNA →
env-79	SRS014573_WUGC_scaffold_53341	-	2102	2041	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →

env-80	SRS013836_C4764451	-	172	111	RNA→
env-81	SRS013879_WUGC_scaffold_28433	-	386	325	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-82	SRS022621_Baylor_scaffold_21872	-	2177	2116	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-83	SRS018439_Baylor_scaffold_23532	+	9031	9092	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118)→
env-84	SRS017533_Baylor_scaffold_41553	+	217	278	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118)→
env-85	SRS019126_WUGC_scaffold_4619	-	2437	2376	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-86	SRS023926_Baylor_scaffold_26039	+	6277	6338	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-87	SRS043772_WUGC_scaffold_22755	+	281	342	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118)→
env-88	SRS024375_LANL_scaffold_10736	-	3452	3391	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-89	SRS024441_LANL_scaffold_44794	+	3740	3801	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-90	SRS049318_LANL_scaffold_50729	-	142	91	RNA→
env-91	SRS052876_LANL_scaffold_40470	+	1404	1465	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-92	SRS063272_C748000	-	2302	2241	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
Psp-2-1	NZ_JRAR01000001.1	+	21162	21223	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
Psp-1-1	NZ_JRAO01000015.1	-	141435	141374	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-93	SRS065099_LANL_scaffold_75481	+	444	494	RNA→
env-94	SRS024087_LANL_scaffold_10975	-	146	89	RNA→ ←hypo
env-95	SRS051941_C4050112	+	680	740	RNA→
env-96	SRS013252_C3518045	-	147	89	RNA→ ←hypo
env-97	SRS020340_C2851743	+	298	348	RNA→
env-98	SRS022602_Baylor_scaffold_25508	+	442	502	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-99	SRS013533_C5285183	-	174	114	RNA→ hypo→
env-100	SRS064449_LANL_scaffold_59809	+	901	951	RNA→
env-101	SRS018394_Baylor_scaffold_53532	+	485	543	RNA→
env-102	SRS018443_C3747335	-	147	89	RNA→
env-103	SRS055378_LANL_scaffold_13183	-	302	242	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-104	SRS011343_Baylor_scaffold_40465	+	3459	3519	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-105	SRS022536_LANL_scaffold_94018	+	614	674	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-106	SRS018394_Baylor_scaffold_31406	-	141	81	RNA→
env-107	SRS063932_LANL_scaffold_4135	+	370	430	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-108	SRS021484_C2188525	+	543	588	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→
env-109	4491423.3_NODE_109420	-	5213	5168	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)→
env-110	07_22_CONTROL_DNA_scaffold544_5	-	2208	2162	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→

env-111	DLM014_scaffold16166_1	-	2097	2051	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-112	SRS011134_C4924861	-	107	61	RNA →
env-113	08_07_CONTROL_DNA_scaffold19619_1	+	164	212	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-114	4491417.3_NODE.65482	+	43644	43690	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) → PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) →
env-115	UnmappedStool_Broad_scaffold_480295	+	268	314	RNA →
env-116	scaffold5632_5_MH0082	+	533	579	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) →
env-117	SRS011134_C4984436	-	407	361	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-118	SRS013476_C3097759	-	391	347	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-119	08_07_GOS_DNA_scaffold4617_3	-	1220	1172	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-120	2227505183	-	3361	3319	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-121	AUXO013899695.1	-	2595	2553	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-122	SRMUA_GNVGR9Q01B8SVR	-	224	182	RNA → hypo →
env-123	UnmappedStool_Broad_C252248201	+	129	180	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-124	scaffold47652_4_V1.CD-9	-	200	152	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-125	scaffold45765_1_V1.CD-14	-	234	186	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-126	TB_AS07_7DRAFT_10003506	-	9850	9788	RNA → AAA (smart00382)COG4185 (COG4185) → hypo →
env-127	AUXO012589404.1	-	241	195	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Pgu-2-1	NZ_KB899151.1	+	86853	86906	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-128	SRS015650_WUGC_scaffold_28866	-	104	54	RNA → ← hypo →
Pgi-3-1	NC_015571.1	-	203700	203647	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Pgu-1-1	NZ_KN294118.1	-	191559	191506	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-129	Supragingival_plaque_LANL_C182748641	+	464	517	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Pgi-2-1	NZ_KI629949.1	-	30096	30043	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → hypo → DUF1661 (pfam07877) → hypo →
Pgu-1-2	NZ_KN300353.1	-	26757	26704	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Pgi-1-1	NZ_KI260120.1	+	16050	16103	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → hypo →
env-130	IMNBL1_c0170688	-	319	279	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-131	scaffold5422_1_MH0052	-	2264	2218	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-132	4491404.3_NODE_83097	+	488	534	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → S4 (smart00363)RpsD (COG0522) →
env-133	scaffold41480_1_MH0050	+	576	622	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-134	scaffold60668_1_V1.CD-4	-	2185	2139	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-135	scaffold2465_4_MH0009	+	398	444	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-136	scaffold8235_1_O2.UC-1	+	66	112	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-137	RUMENNODE_2120037_111501	-	19738	19691	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-138	2226980356	+	42770	42818	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-139	2226950443	-	4600	4552	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-140	AUXO015494899.1	-	713	671	RNA → hypo → RpsD (COG0522)rpsD (PRK05327) →
env-141	AUXO012655293.1	-	833	792	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_poL (pfam01193) →

env-142	RUMENNODE.3549585_6500	+	14797	14838	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-143	IMNBL1.c0000682	-	10946	10899	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-144	BABD01035948.1	+	534	582	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-145	IMNBL1.c0200996	+	120	168	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-146	4491423.3_NODE.100943	+	2001	2049	RNA → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) →
env-147	scaffold61064_2_MH0006	+	191	239	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-148	SRS049900.LANL.scaffold.12941	+	867	915	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → S4 (smart00363)RpsD (COG0522) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-149	scaffold72032_1_V1.CD-14	+	421	469	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-150	ADJT01001361.1	+	384	432	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-151	scaffold31110_2_MH0019	+	232	280	RNA → hypo → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-152	scaffold5909_2_O2.UC-14	+	57	105	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-153	BABB01007995.1	+	205	253	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-154	contig19424	-	1081	1033	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) →
env-155	scaffold56457_1_MH0055	+	255	303	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-156	NLM015.scaffold12871.4	+	134	182	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) →
env-157	scaffold93277_1_MH0053	+	467	505	RNA → hypo →
env-158	scaffold17281_3_MH0030	+	410	458	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-159	scaffold738_1_V1.CD-6	-	143	95	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-160	scaffold26767_2_MH0040	+	57	105	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-161	SRS019968_Baylor.scaffold.6283	+	260	308	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-162	SRS045645_Baylor.scaffold.14899	+	400	448	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-163	scaffold4241_1_MH0044	-	389	341	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-164	SRS051882_Baylor.scaffold.18491	-	625	577	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-165	scaffold33930_1_O2.UC-18	-	952	904	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) →
env-166	BAAZ01001952.1	+	529	577	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-167	SRS024435.LANL.scaffold.22712	+	73	121	RNA → hypo → RpsD (COG0522)rpsD (PRK05327) →
env-168	SRS064557.LANL.scaffold.25854	-	129	81	RNA →
env-169	SRS015782.WUGC.scaffold.11293	+	369	417	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-170	4448814.3_Contig42594	-	675	627	RNA → S4 (smart00363)RpsD (COG0522) →
env-171	DOM019.scaffold22337_4	-	435	387	RNA → S4 (smart00363)RpsD (COG0522) →
env-172	BABD01010849.1	-	1356	1308	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-173	4491416.3_NODE.237	-	10253	10205	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-174	SRS020869_Baylor.scaffold.2934	-	190	142	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-175	4491421.3_NODE.99843	+	4017	4065	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-176	JGI994J12354_10027568	+	2149	2191	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-177	JGI24707J26582_10000222	-	2326	2281	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-178	BAAZ01024853.1	-	919	881	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) →
env-179	AUXO015025041.1	-	398	345	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-180	AUXO016702402.1	+	524	595	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-181	NLM006.scaffold52536_3	+	16553	16592	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-182	DLM007.scaffold5141_17	+	197	236	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-183	scaffold27115_3_MH0036	+	146	185	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-184	scaffold335_4_MH0020	-	659	620	RNA → RpsD (COG0522)rpsD (PRK05327) →

env-185	scaffold9913.1_MH0050	-	682	643	RNA → RpsD (COG0522)rpsD (PRK05327) →
Pxy-1-1	NZ_GL883867.1	-	21352	21313	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → rplQ (PRK05591)Ribosomal.L17 (pfam01196) → hypo →
env-186	SRS048164_WUGC_scaffold_34643	+	433	472	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-187	scaffold10151.5_MH0073	-	692	653	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-188	IMNBL1.c0003450	+	7491	7530	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-189	SRS011529_WUGC_scaffold_6343	-	1690	1641	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) →
env-190	scaffold39757.1_MH0036	-	40	1	RNA →
env-191	scaffold56046.2_MH0046	-	982	933	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_poL (pfam01193) →
env-192	AUXO013662250.1	-	353	304	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-193	AUXO011716848.1	+	267	316	RNA → S4 (smart00363)RpsD (COG0522) →
env-194	AUXO012267364.1	+	526	565	RNA →
env-195	AUXO014724871.1	-	701	652	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-196	AUXO015059357.1	+	29	78	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-197	AUXO018761249.1	-	194	146	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-198	2227339052	-	167	127	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-199	JGI994J12354.10199883	-	251	211	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-200	2227053765	+	147	187	RNA →
env-201	JGI994J12354.10460523	+	203	243	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-202	2227095262	-	330	290	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-203	IMNBL1.c0184244	-	414	374	RNA → S4 (smart00363)RpsD (COG0522) →
env-204	JGI994J12354.10281577	+	401	441	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-205	IMNBL1.c0088446	-	33	3	RNA →
env-206	IMNBL1.c0076852	+	129	169	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_poL (pfam01193) →
env-207	JGI994J12354.10160833	-	704	664	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-208	2227437209	+	431	471	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-209	2227588074	+	10	50	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-210	JGI996J12353.1011164	-	683	643	RNA → hypo → RpsD (COG0522)rpsD (PRK05327) →
env-211	JGI994J12354.10602131	-	192	152	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-212	2227213828	-	194	154	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-213	JGI994J12354.10069051	+	854	894	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-214	2227339122	+	4240	4280	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-215	IMNBL1.c0070425	+	630	670	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-216	JGI994J12354.10305054	+	142	182	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-217	JGI994J12354.10567243	+	174	214	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-218	IMNBL1.c0000677	-	14388	14348	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-219	AUXO014137175.1	-	93	54	RNA → ← hypo
env-220	RUMENNODE.1342001.1	+	2330	2377	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-221	HCF14C.3.8265.1	-	4204	4157	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-222	SRS023604_C783111	-	1719	1672	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-223	AUXO012249817.1	-	397	349	RNA → rpsD (PRK05327)Ribosomal.S4 (pfam00163) →
env-224	4491407.3_NODE.8402	-	3326	3285	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-225	JGI20225J20221.1000009	+	207606	207653	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →

env-226	BMHB3a_c40323	+	123	170	RNA → rpsD (PRK05327) Ribosomal_S4 (pfam00163) →
env-227	JGI26523J50269_1000101	+	49816	49858	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203) rplQ (PRK05591) →
env-228	JGI24499J29688_1097403	+	252	294	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-229	JGI24707J26582_10042111	-	641	599	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-230	2211024960	+	90	132	RNA →
env-231	3300000408_102220	-	1904	1862	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
env-232	PBDCA2_contig35478	-	23100	23058	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → PLN02967 (PLN02967) RplQ (COG0203) rplQ (PRK05591) →
env-233	3300000032_0074524	+	1154	1196	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-234	ASA126_GJFDWOI01ADAYG	+	127	159	RNA →
env-235	ASA129_GJG7ZZE02HS6CS	-	131	89	RNA → ←-hypo
env-236	JGI24707J26582_10313961	-	186	144	RNA → rpsD (PRK05327) Ribosomal_S4 (pfam00163) →
env-237	JGI25321J50212_10130561	-	85	43	RNA →
env-238	3300000568_10484048	-	237	195	RNA → rpsD (PRK05327) Ribosomal_S4 (pfam00163) →
env-239	JGI26523J50269_1018190	-	360	318	RNA → rpsD (PRK05327) Ribosomal_S4 (pfam00163) →
Pac-1-1	NZ_KB905713.1	-	5768	5726	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → hypo → RplQ (COG0203) rplQ (PRK05591) →
env-240	3300001580_10221456	-	676	634	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-241	3300001592_10979244	-	128	86	RNA → ←-hypo
env-242	4444165.3.06214	+	723	765	RNA → RpsD (COG0522) rpsD (PRK05327) → RpoA (COG0202) PRK05182 (PRK05182) → PRK05182 (PRK05182) RNA_pol_L (pfam01193) →
env-243	PRSSGFe2_Sequence0000000352	-	11315	11273	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
env-244	BMHBC_1.1_newblercontig05403	-	204	162	RNA → hypo →
env-245	JFJP01044180.1	+	7301	7343	RNA → RpsD (COG0522) rpsD (PRK05327) → RpoA (COG0202) PRK05182 (PRK05182) → RplQ (COG0203) rplQ (PRK05591) →
Ppr-1-1	NC_014734.1	+	2990427	2990469	RNA → RpsD (COG0522) rpsD (PRK05327) → RpoA (COG0202) PRK05182 (PRK05182) → RplQ (COG0203) rplQ (PRK05591) →
env-246	SRS016095_WUGC_scaffold_14591	+	280	322	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-247	SRS014235_WUGC_scaffold_63059	+	873	915	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-248	JGI24728J21555_1099436	-	413	371	RNA → hypo → RpsD (COG0522) rpsD (PRK05327) →
env-249	JGI24731J21663_1020569	+	1048	1090	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-250	AUXO012304620.1	+	104	149	RNA → rpsD (PRK05327) Ribosomal_S4 (pfam00163) →
env-251	scaffold9573_4_O2.UC-24	-	2883	2838	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
env-252	scaffold28280_3_MH0054	+	981	1024	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-253	4491423.3_NODE_100453	+	1380	1423	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-254	2014748740	+	450	493	RNA → rpsD (PRK05327) Ribosomal_S4 (pfam00163) →
env-255	PRSSGFe2_Sequence0000029464	-	952	909	RNA → RpsD (COG0522) rpsD (PRK05327) → PRK05182 (PRK05182) RNA_pol_L (pfam01193) →
env-256	JGI20225J20221_1000111	-	93620	93577	RNA → RpsD (COG0522) rpsD (PRK05327) → RpoA (COG0202) PRK05182 (PRK05182) → RplQ (COG0203) rplQ (PRK05591) →
env-257	BMHBC_193261	-	2611	2568	RNA → RpsD (COG0522) rpsD (PRK05327) → RpoA (COG0202) PRK05182 (PRK05182) → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
env-258	2210576792	+	262	295	RNA →
env-259	JGI24500J29687_10051329	+	16282	16325	RNA → RpsD (COG0522) rpsD (PRK05327) →

Dga-1-1	NZ_GL891985.1	-	188070	188027	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-260	2227035932	+	1370	1413	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Psp-4-1	NZ_JOMI01000002.1	+	192990	193033	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-261	SRS019267_WUGC_scaffold_20085	+	866	910	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-262	DOM012_scaffold34729_1	-	2272	2228	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-263	Subgingival_plaque_LANL_C11140467	-	365	321	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-264	SRS015650_WUGC_scaffold_24783	-	465	421	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-265	AUXO013584032.1	+	2699	2747	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-266	AUXO015681238.1	-	390	342	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-267	AUXO016113898.1	-	81	43	RNA →
env-268	AUXO017288013.1	+	160	208	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-269	HCF14C_3.8874_1	+	1171	1219	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-270	AUXO013556098.1	-	428	380	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-271	AUXO016146758.1	-	533	485	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-272	BMHB3a_c152975	+	10118	10161	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-273	MA40A_contig27223	-	222	179	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-274	HCE12Call500_c0170529	-	10250	10193	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poLA_CTD (pfam03118) → rplQ (PRK05591)PRK13108 (PRK13108)Ribosomal_L17 (pfam01196) →
env-275	HCF12C_392227	+	332	389	RNA → RpsD (COG0522)rpsD (PRK05327) → hypo →
env-276	AUXO017050186.1	-	255	205	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-277	HCE12Call500_c0119666	-	1945	1895	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-278	DLM004_scaffold13460_1	+	661	692	RNA →
env-279	DOF009_scaffold34853_1	+	760	801	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-280	SRS011239_Baylor_scaffold_2110	+	507	538	RNA →
env-281	SRS016095_WUGC_scaffold_12148	-	67	36	RNA →
env-282	SRS064276_LANL_scaffold_7093	+	4193	4234	RNA → RNAP_alpha_NTD (cd06928)RpsD (COG0522)PRK05182 (PRK05182)rpsD (PRK05327) →
env-283	NLM015_scaffold155_4_1	+	381	422	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-284	SRS013687_Baylor_scaffold_7394	+	426	457	RNA →
env-285	SRS049164_WUGC_scaffold_32178	-	432	394	RNA → S4 (smart00363)RpsD (COG0522) →
env-286	BAAU01005463.1	-	1319	1278	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-287	DLF004_scaffold26868_1	+	661	692	RNA →
env-288	4491423_3_NODE_37638	-	96	55	RNA →
env-289	NLM017_scaffold62_7	-	557	516	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-290	SRS014235_WUGC_scaffold_35424	+	572	603	RNA →
env-291	SRS022137_WUGC_scaffold_15988	-	582	541	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-292	BABD01000634.1	-	4603	4562	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-293	NOM029_scaffold258_6	-	188	147	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-294	SRS019582_WUGC_scaffold_26735	-	412	371	RNA → S4 (smart00363)RpsD (COG0522) →
env-295	AJWZ01010988.1	-	301	260	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-296	pre-rum103-03185	+	251	292	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →

env-297	longitudinal_403_1247	-	4435	4394	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-298	NOF010_scaffold29793_5	-	3201	3160	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-299	4491406.3_NODE_31370	-	670	629	RNA → RpsD (COG0522)rpsD (PRK05327) →
Dsp-2-1	NZ_CVRU01000083.1	+	63519	63561	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-300	IMNBL1_c0075309	-	465	423	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-301	IMNBL1_c0368275	-	321	279	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-302	JGI994J12354_10022051	+	3246	3288	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-303	2227309966	+	229	271	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_poL (pfam01193) →
env-304	IMNBL1_c0230034	+	279	321	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-305	IMNBL1_c0105304	-	213	171	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Dca-1-1	NZ_AUFL01000019.1	+	53200	53242	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-306	2210995755	-	175	133	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-307	JGI24728J21555_1006805	-	154	112	RNA →
Bpy-2-1	NZ_BAIU01000011.1	-	29809	29767	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-308	pre-rum103-00894	-	9641	9599	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Bpy-1-1	NZ_KE993121.1	+	42744	42786	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-309	IMNBL1_c0157636	+	159	202	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-310	4491406.3_NODE_15769	+	177	209	RNA →
env-311	DLM010_scaffold16098_1	+	260	302	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-312	4491419.3_NODE_2960	+	462	504	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-313	DOM010_scaffold7295_1	-	660	618	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-314	contig107354	+	383	425	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-315	NOF012_scaffold53092_1	-	107	65	RNA →
env-316	4491485.3_NODE_4702	-	97	55	RNA →
env-317	4491410.3_NODE_989	-	129	87	RNA →
env-318	4444165.3.13720	+	60	102	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → S4 (smart00363)S4 (cd00165) →
Bst-1-1	NZ_BAKL01000061.1	-	5724	5682	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-319	4491423.3_NODE_71282	-	97	55	RNA → hypo →
Bti-1-1	NZ_CBVI01000016.1	-	5424	5382	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-320	4491408.3_NODE_13301	+	9879	9921	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_poL_A_bac (pfam01000) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-321	4491420.3_NODE_10528	+	459	491	RNA →
env-322	4491490.3_NODE_12841	-	663	621	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-323	NLM007_scaffold12180_2	-	617	575	RNA → RpsD (COG0522)rpsD (PRK05327) →
Bac-1-1	NZ_CDP010000609.1	-	2777	2735	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-324	BABA01006018.1	-	202	160	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-325	NLF013_scaffold515_5	-	614	572	RNA → RpsD (COG0522)rpsD (PRK05327) →
Bol-1-1	NZ_JH992946.1	+	318016	318058	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-326	08_07_GOS_DNA_scaffold96420_2	-	86	48	RNA →
env-327	BMHBC_1.1_newblercontig337321	+	91	124	RNA →
env-328	DLM003_C759402_1	-	450	412	RNA → S4 (smart00363)RpsD (COG0522) →

env-329	SRS022137_WUGC_scaffold_2662	-	466	423	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-330	NOF008_scaffold26002_3	+	1309	1342	RNA→
env-331	BABA01023720.1	+	559	602	RNA→ hypo→
env-332	4491402.3_NODE.2368	-	33517	33474	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-333	longitudinal_29_3	+	29258	29301	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-334	4491406.3_NODE.26822	+	457	490	RNA→
Bfa-1-1	NZ_BAKK01000025.1	-	22207	22164	RNA→ RpsD (COG0522)rpsD (PRK05327)→ hypo→ hypo→ RplQ (COG0203)rplQ (PRK05591)→
env-335	NOM012_scaffold23_1	-	506	463	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-336	GO4KUYH01EWM5T	-	370	327	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
Bre-1-1	NZ_BAIV01000005.1	+	187594	187637	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-337	4491408.3_NODE.8793	-	1690	1647	RNA→ RpoA (COG0202)RpsD (COG0522)PRK05182 (PRK05182)rpsD (PRK05327)→
Bno-1-1	NZ_JH724317.1	-	84405	84362	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-338	2205287234	-	44	11	RNA→ hypo→
Bno-2-1	NZ_BAJA01000009.1	+	40118	40161	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-339	NOF007_scaffold44_16	-	1160	1117	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)→
env-340	4491479.3_NODE.1257	-	110	67	RNA→
env-341	DLM020_scaffold13017_1	+	262	305	RNA→ ←hypo
env-342	DLF001_scaffold15389_1	+	209	252	RNA→ RpsD (COG0522)rpsD (PRK05327)→ PRK05182 (PRK05182)RNA_pol.L (pfam01193)→
env-343	BAA01022580.1	-	570	527	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-344	NLM003_scaffold34637_1	+	211	254	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-345	DLM001_scaffold23897_1	+	340	383	RNA→ ←hypo
Bne-1-1	NZ_HG726019.1	+	504025	504068	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-346	4491421.3_NODE.13085	+	481	519	RNA→ hypo→
env-347	4448820.3_Contig.2741	-	878	840	RNA→ rpsD (PRK05327)→ S4 (smart00363)RpsD (COG0522)→
env-348	DOF009_scaffold33995_5	+	427	465	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-349	4491404.3_NODE.40545	+	40773	40812	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-350	NOM026_scaffold21137_8	+	135	174	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-351	CAM_READ_0099620383	+	156	195	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-352	NOM020_scaffold32164_1	-	530	491	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-353	CAM_READ_0099614309	-	253	214	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-354	CAM_READ_0100028819	+	179	218	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
Bba-2-1	NZ_KB894657.1	+	44135	44174	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)rpsP (PRK14521)→ rplQ (PRK05591)rpsP (PRK14521)Ribosomal_L17 (pfam01196)→
env-355	CAM_READ_0100328893	-	402	362	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-356	4448808.3_Contig2785	-	1614	1574	RNA→ S4 (smart00363)RpsD (COG0522)→
env-357	4448807.3_Contig36355	+	56	95	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→ S4 (smart00363)RpsD (COG0522)→
env-358	CAM_READ_0100031775	-	293	253	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-359	4448817.3_Contig4536	-	2122	2083	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→ S4 (smart00363)RpsD (COG0522)→ RpoA (COG0202)PRK05182 (PRK05182)→ RNAP_alpha_NTD (cd06928)rpoA (TIGR02027)→
env-360	DLF003_scaffold27229_5	-	2090	2051	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-361	NLM032_scaffold69263_2	-	652	613	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-362	CAM_READ_0099610915	-	85	46	RNA→
env-363	NLM015_scaffold45_1	+	4595	4634	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-364	CAM_READ_0099599333	+	212	241	RNA→
env-365	CAM_READ_0099868351	-	223	184	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→

env-366	4448815.3.Contig20136	+	237	276	RNA→ REC (smart00448)REC (cd00156)→
env-367	4448815.3.Contig4225	+	1077	1117	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→ S4 (smart00363)RpsD (COG0522)→
env-368	CAM_READ_0100032315	-	355	315	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-369	CAM_READ_0099824453	-	464	423	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-370	4448811.3.Contig24646	+	402	441	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-371	4448816.3.Contig535	+	7083	7122	RNA→ PRK05309 (PRK05309)RpsK (COG0100)→
env-372	4491477.3.NODE_13450	+	289	328	RNA→
env-373	BABD01000252.1	+	1870	1909	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-374	BAAY01002401.1	-	744	705	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-375	4448812.3.Contig31152	+	433	472	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-376	DOM014.scaffold10613_2	+	79	118	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-377	longitudinal_9_1858	-	1614	1575	RNA→ RpsD (COG0522)rpsD (PRK05327)→
Bma-1-1	NZ_KE159493.1	+	945671	945710	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-378	SRS011586_WUGC_scaffold_3940	+	681	720	RNA→
env-379	contig03653	-	603	564	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-380	AMCI01000278.1	-	2219	2180	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→ hypo→
env-381	NLF011_scaffold2976_3	-	407	368	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-382	SRS018656_C1624822	-	39	10	RNA→
env-383	4444165.3.59663	-	347	308	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
Bsa-1-1	NC_015164.1	-	2309295	2309256	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)PRK10905 (PRK10905)→
env-384	4491421.3.NODE_98220	-	2451	2411	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-385	4491405.3.NODE_15725	-	729	690	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-386	4491405.3.NODE_3691	-	706	667	RNA→ RpsD (COG0522)rpsD (PRK05327)→
Bfi-1-1	NZ_GG688317.1	+	227372	227415	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-387	DOF008_scaffold9719_2	+	318	361	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-388	longitudinal_208_91	+	6255	6298	RNA→ hypo→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-389	SRS022713_LANL_scaffold_2857	-	541	498	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-390	DLM011_scaffold1111_2	+	788	821	RNA→
env-391	SRS023346_LANL_scaffold_1997	+	289	322	RNA→
env-392	scaffold5201_4_MH0074	-	616	573	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-393	4491407.3.NODE_11023	-	669	626	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-394	UnmappedStool_Broad_scaffold_100816	+	284	318	RNA→
env-395	SRS015264_WUGC_scaffold_68015	-	1367	1323	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)→
env-396	SRS011586_C3383160	+	59	103	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-397	DLM001_scaffold28826_29	+	13800	13834	RNA→
env-398	SRS013476_C2866296	-	270	226	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
Bhe-1-1	NC_014933.1	+	1368692	1368731	RNA→ hypo→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-399	4491411.3.NODE_7528	+	1171	1210	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
Bfi-1-1	NZ_GL882630.1	+	110961	111000	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_poL_A_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→ hypo→
env-400	IMNBL1.c0000119	+	20286	20326	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-401	2226960311	-	510	470	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-402	JGI26534J51046_1128446	-	112	72	RNA→ ← hypo
env-403	JGI994J12354_10651307	-	257	217	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→

env-404	2227529292	+	543	583	RNA → ←-hypo
env-405	JGI994J12354_10765493	+	91	133	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-406	IMNBL1_c0050277	-	364	322	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Bpa-1-1	NZ_BAJR01000002.1	+	224743	224783	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-407	BABD01002563.1	+	2434	2474	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-408	4491404.3_NODE_23173	-	1622	1582	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
Bba-1-1	NZ_AUTU01000007.1	+	71664	71704	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-409	AUXO016092034.1	-	828	788	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-410	DLM007_scaffold43740.1	+	868	908	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-411	BMHB3a_c153300	+	16662	16702	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-412	JGI24728J21555_1016111	-	1883	1843	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-413	BMHBC_922	+	4020	4060	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-414	HCF12C_147729	+	276	306	RNA →
Bpr-1-1	NZ_AQWS01000016.1	+	67128	67168	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Bco-1-1	NZ_CM001167.1	-	250156	250116	RNA → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-415	JGI26523J50269_1004409	+	2776	2819	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-416	3300000408_102680	+	393	436	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-417	scaffold27906_1_MH0037	-	715	672	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → RpsD (COG0522)rpsD (PRK05327) →
Bvi-1-1	NZ_CP007034.1	+	1999562	1999605	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-418	scaffold5855_4_MH0006	-	1933	1890	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-419	4491415.3_NODE_16450	+	1929	1972	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-420	scaffold13158_6_MH0012	+	400	443	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-421	BMHB3a_c149458	-	1857	1814	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-422	RUMENNODE_488125_148000	-	776	733	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182) →
env-423	scaffold8032_1_MH0020	-	100	57	RNA →
env-424	UnmappedStool_Broad_C251130659	-	263	220	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-425	HCE12Call500_c0131960	+	95	141	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-426	2013403773	+	632	678	RNA → ←-hypo
env-427	JGI20163J15578_10124444	-	233	192	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-428	JGI20163J15578_10757792	-	551	510	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-429	Incwf_1000509	-	63510	63469	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-430	IMNBL1_c0128642	-	512	471	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-431	2227561212	-	532	491	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-432	2227599765	-	41	10	RNA →

Dsp-1-1	NZ_CVRP01000013.1	-	125218	125177	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-433	2210517547	-	191	150	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-434	JGI26523J50269_1102284	-	319	278	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Bga-1-1	NZ_KB894134.1	-	31988	31948	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-435	NLF006_scaffold28489_1	+	1163	1203	RNA →
env-436	BABD01000996.1	+	324	364	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → S4 (smart00363)RpsD (COG0522) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-437	CAM_READ_0099683363	+	274	314	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-438	CAM_READ_0100181161	+	263	303	RNA →
env-439	CAM_READ_0100124625	+	293	334	RNA →
env-440	CAM_READ_0099376081	+	46	86	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → S4 (smart00363)S4 (pfam01479) →
env-441	CAM_READ_0099881367	+	377	407	RNA →
env-442	4448820.3_Contig_2096	+	70	110	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → S4 (smart00363)RpsD (COG0522) →
env-443	4491406.3_NODE_1651	-	106	66	RNA →
env-444	SRS057478_LANL_scaffold_3450	+	67	107	RNA → ← hypo
env-445	BABB01003051.1	+	162	202	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-446	BAA01002159.1	+	2011	2051	RNA → RpsD (COG0522)rpsD (PRK05327) → hypo →
env-447	4448808.3_Contig27637	-	313	273	RNA →
env-448	DOM001_scaffold38696_1	-	521	481	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-449	NOM016_scaffold2065_1	+	772	812	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-450	SRS023176_Baylor_scaffold_1186	-	45	15	RNA →
env-451	4448815.3_Contig37632	-	426	386	RNA → S4 (smart00363)RpsD (COG0522) →
env-452	4491401.3_NODE_53198	+	747	787	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-453	4491419.3_NODE_6796	-	720	680	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-454	DLF004_scaffold28173_1	+	663	703	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-455	NOM012_scaffold42779_1	-	646	606	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-456	NOM020_scaffold27835_3	-	612	572	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-457	4448814.3_Contig417	-	3940	3900	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → hypo →
env-458	NOM015_scaffold155_1	+	161	201	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-459	SRS015960_WUGC_scaffold_3709	-	45	15	RNA →
env-460	SRS049900_LANL_scaffold_2992	-	369	329	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-461	4448813.3_Contig19274	-	59	29	RNA →
env-462	SRS018665_C3523114	+	23	70	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-463	SRS019128_C4417707	-	737	690	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-464	SRS022536_LANL_scaffold_112290	+	4797	4844	RNA → S4 (smart00363)RpsD (COG0522) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-465	SRS016575_Baylor_scaffold_36465	-	658	611	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-466	SRS050628_C1820033	+	47	94	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-467	SRS052876_LANL_scaffold_11771	+	2902	2949	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-468	SRS063603_LANL_scaffold_98718	-	50	13	RNA →
env-469	SRS017227_Baylor_scaffold_160228	+	643	690	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-470	SRS018394_Baylor_scaffold_73299	+	6083	6130	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-471	SRS021496_Baylor_scaffold_84955	-	737	690	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-472	SRS023595_Baylor_scaffold_87344	-	329	282	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-473	SRS024289_LANL_scaffold_49264	+	21972	22019	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-474	SRS052604_C1840067	+	1153	1200	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-475	SRS058808_C2801786	+	507	554	RNA →

env-476	SRS065099_C2629417	-	284	237	RNA → RpsD (PRK05327) Ribosomal_S4 (pfam00163) →
env-477	Buccal_mucosa_LANL_scaffold_111229	-	710	663	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-478	SRS013705_Baylor_scaffold_103305	-	435	388	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-479	SRS018443_C3874981	+	304	351	RNA → RpsD (COG0522) rpsD (PRK05327) → RpoA (COG0202) PRK05182 (PRK05182) →
env-480	SRS017304_Baylor_scaffold_31533	+	6469	6516	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928) PRK05182 (PRK05182) RNA_pol_A_CTD (pfam03118) → RplQ (COG0203) rplQ (PRK05591) →
env-481	SRS013252_Baylor_scaffold_26940	+	960	1007	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-482	SRS019028_WUGC_scaffold_45751	-	423	376	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-483	SRS012279_Baylor_scaffold_66400	-	3211	3164	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928) PRK05182 (PRK05182) RNA_pol_A_CTD (pfam03118) → RplQ (COG0203) rplQ (PRK05591) →
env-484	SRS015893_C2389359	-	740	693	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-485	SRS049268_C4370284	+	2539	2576	RNA →
env-486	SRS051930_C3081289	-	76	39	RNA →
env-487	SRS055378_LANL_scaffold_88414	-	2987	2940	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928) PRK05182 (PRK05182) RNA_pol_A_CTD (pfam03118) → RplQ (COG0203) rplQ (PRK05591) →
env-488	SRS016360_C2594021	-	74	37	RNA → ← hypo
env-489	SRS017511_Baylor_scaffold_44051	-	4149	4102	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928) PRK05182 (PRK05182) RNA_pol_A_CTD (pfam03118) → RplQ (COG0203) rplQ (PRK05591) →
env-490	SRS018739_WUGC_scaffold_35509	+	66	113	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-491	SRS022143_WUGC_scaffold_58148	+	62	109	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928) PRK05182 (PRK05182) RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
env-492	SRS024087_LANL_scaffold_25676	+	1061	1108	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928) PRK05182 (PRK05182) RNA_pol_A_CTD (pfam03118) → RplQ (COG0203) rplQ (PRK05591) →
env-493	SRS047113_C5300540	-	121	74	RNA →
env-494	SRS055450_LANL_scaffold_68076	+	1281	1328	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928) PRK05182 (PRK05182) RNA_pol_A_CTD (pfam03118) → RplQ (COG0203) rplQ (PRK05591) →
env-495	SRS013723_Baylor_scaffold_78094	+	134	181	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-496	SRS015574_WUGC_scaffold_47042	+	110	157	RNA → RpsD (COG0522) rpsD (PRK05327) → PRK05182 (PRK05182) RNA_pol_L (pfam01193) →
env-497	SRS013533_C5397762	+	347	394	RNA →
env-498	SRS013170_C3989364	+	202	245	RNA →
env-499	SRS015215_C2525062	-	60	23	RNA →
env-500	SRS015762_C3609878	+	796	843	RNA →
env-501	SRS015434_C5621575	+	192	237	RNA →
env-502	SRS013170_Baylor_scaffold_120567	+	426	471	RNA →
env-503	SRS023595_C7159178	+	773	808	RNA →
env-504	scaffold11811_2_MH0082	+	201	253	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-505	08_07_XOS_DNA_scaffold14885_1	-	241	196	RNA → RpsD (PRK05327) Ribosomal_S4 (pfam00163) →
env-506	SRS022071_C2972092	+	67	112	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-507	08_19_CONTROL_DNA_scaffold3842_6	-	647	602	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-508	07_22_CONTROL_DNA_scaffold5573_1	+	364	409	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-509	07_22_CONTROL_DNA_scaffold54317_1	+	232	277	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928) PRK05182 (PRK05182) RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591) Ribosomal_L17 (pfam01196) →
env-510	07_22_INULIN_DNA_scaffold23708_1	+	190	235	RNA → RpsD (COG0522) rpsD (PRK05327) →
env-511	scaffold11208_4_MH0083	+	4936	4981	RNA → RpsD (COG0522) rpsD (PRK05327) → RpoA (COG0202) PRK05182 (PRK05182) → RplQ (COG0203) rplQ (PRK05591) →
env-512	07_22_INULIN_DNA_scaffold131_3	-	1214	1169	RNA → RpsD (COG0522) rpsD (PRK05327) → RNAP_alpha_NTD (cd06928) PRK05182 (PRK05182) →
env-513	scaffold80135_1_MH0077	-	1023	978	RNA → RpsD (COG0522) rpsD (PRK05327) → PRK05182 (PRK05182) RNA_pol_L (pfam01193) →

env-514	O8_19_POLYDEXT_DNA_scaffold5982_10	+	115	160	RNA→	RpsD (COG0522)rpsD (PRK05327)→
env-515	mgutOb2_U_BM_aaa76b05_b1	-	766	721	RNA→	RpsD (COG0522)rpsD (PRK05327)→
env-516	SRS022137_WUGC_scaffold_28771	+	14373	14420	RNA→	RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-517	UnmappedStool_Broad_C251091185	-	208	165	RNA→	rpsD (PRK05327)Ribosomal_S4 (pfam00163)→

14.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 14.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one S4-

cd00156 (1) Signal receiver domain; originally thought to be unique to bacteria (CheY, OmpR, NtrC, and PhoB), now recently identified in eukaryotes ETR1 *Arabidopsis thaliana*; this domain receives the signal from the sensor partner in a two-component systems; contains a phosphoacceptor site that is phosphorylated by histidine kinase homologs; usually found N-terminal to a DNA binding effector domain; forms homodimers

cd00165 (1) S4/Hsp/ tRNA synthetase RNA-binding domain; The domain surface is populated by conserved, charged residues that define a likely RNA-binding site; Found in stress proteins, ribosomal proteins and tRNA synthetases; This may imply a hitherto unrecognized functional similarity between these three protein classes.

cd06928 (96) N-terminal domain of the Alpha subunit of Bacterial RNA polymerase.

COG0100 (2) Ribosomal protein S11 [Translation, ribosomal structure and biogenesis]

COG0202 (94) DNA-directed RNA polymerase, alpha subunit/40 kD subunit [Transcription]

COG0203 (132) Ribosomal protein L17 [Translation, ribosomal structure and biogenesis]

COG0522 (341) Ribosomal protein S4 or related protein [Translation, ribosomal structure and biogenesis]

COG4185 (1) Predicted ABC-type ATPase [General function prediction only]

pfam00163 (100) Ribosomal protein S4/S9 N-terminal domain.

pfam01000 (1) RNA polymerase Rpb3/RpoA insert domain.

Bacteroidia RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 14.2.

pfam01193 (26) RNA polymerase Rpb3/Rpb11 dimerisation domain.

pfam01196 (33) Ribosomal protein L17.

pfam01479 (1) S4 domain.

pfam03118 (79) Bacterial RNA polymerase, alpha chain C terminal domain.

pfam07877 (1) Protein of unknown function (DUF1661).

PLN02967 (1) kinase

PRK05182 (218) DNA-directed RNA polymerase subunit alpha; Provisional

PRK05309 (2) 30S ribosomal protein S11; Validated

PRK05327 (423) 30S ribosomal protein S4; Validated

PRK05591 (165) 50S ribosomal protein L17; Validated

PRK10905 (1) cell division protein DamX; Validated

PRK13108 (1) prolipoprotein diacylglycerol transferase; Reviewed

PRK14521 (2) 30S ribosomal protein S16; Provisional

smart00363 (21) S4 RNA-binding domain.

smart00382 (1) ATPases associated with a variety of cellular activities.

smart00448 (1) cheY-homologous receiver domain.

TIGR02027 (1) DNA-directed RNA polymerase, alpha subunit, bacterial and chloroplast-type. [Transcription, DNA-dependent RNA polymerase]

14.4 Multiple-sequence alignment

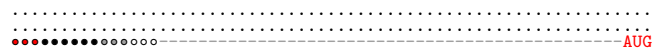
Each S4-Bacteroidia RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 14.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The S4-Bacteroidia RNA itself is denoted by the line underneath marked 5’ and 3’ on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNI software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these predictions are manually an-

notated, so they might be under-predicted.) Annotated start codons, if any, are shaded green. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-Crick or G-U pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that


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env-242 AAAUUUUAAAAGAA . . . . . AUG
env-243 UUUAAAACAA . . . . . AUG
env-244 AACGCAUAAUAAAUAAAUAUAAAUA . . . . . AUG
env-245 AACACAUAAACAAUUUUAAUAAA . . . . . AUG
Ppr-1-1 AACACAUAAAUAAUUUUAAUAAAUA . . . . . AUG
env-246 AUUAAAUAUUUAGAA . . . . . AUG
env-247 UAAAAAAAUAUAGAA . . . . . AUG
env-248 AACAAUAGAAAA . . . . . AUG
env-249 AACAAUAGAAAA . . . . . AUG
env-250 CUUUAAAACGAAUUACCAA . . . . . AUG
env-251 UUUAAAUAUUUAGAA . . . . . AUG
env-252 UUUAAAUCUACUAAA . . . . . AUG
env-253 UUUAAAUCUACUAAA . . . . . AUG
env-254 UUUAAAA . . . . . AUG
env-255 AUAAUCACAAAA . AUUUUAAAUA . . . . . AUG
env-256 AUAAUCACAAAAACUUUGAAAAU . . . . . AUG
env-257 AUAAUCACAAAAACUUUGAAAAU . . . . . AUG
env-258 . . . . . AUG
env-259 UAAUUUGUAAAA . . . . . AUG
Dga-1-1 AGAAAAGAA . . . . . AUG
env-260 AGAAAAGAA . . . . . AUG
Psp-4-1 AGAAAAGAA . . . . . AUG
env-261 AUUUUUAAAAGUAUUAGAA . . . . . AUG
env-262 UUUUUAAAAGAAUUAGAA . . . . . AUG
env-263 AAAUUAAAAGAAUAAA . . . . . AUG
env-264 AAAUUAAAAGAAUAAA . . . . . AUG
env-265 AUUUUUUAAAA . . . . . AUG
env-266 UAAUUUAGAAAA . . . . . AUG
env-267 UAAUUUAGAAAA . . . . . AUG
env-268 AUUUUUUUAAAAGAAAGACU . . . . . AUG
env-269 AUUUAAUUUUUUAAAAGAAAA . . . . . AUG
env-270 UUUAAUUUAGAAAA . . . . . AUG
env-271 UUUAAUUUAGAAAA . . . . . AUG
env-272 AUUUAAAAGAAA . . . . . AUG
env-273 AUUUAAAAGAAA . . . . . AUG
env-274 UUUAAUUCAUUUUUUUAGAUUAAA . . . . . AUG
env-275 UUUAAUUCAUUUUUUUAGAUUAAA . . . . . AUG
env-276 AAUUUUUCAAUUCAAA . . . . . AUG
env-277 CUUUCAUUUUUAAAAGACU . . . . . AUG
env-278 AAAAUUUUAAAAGA . . . . . AUG
env-279 AAAAUUUUAAAAGA . . . . . AUG
env-280 AAAUA . . . . . AUG
env-281 AAAUA . . . . . AUG
env-282 AAAAUUUUAAAAGA . . . . . AUG
env-283 AAAAUUUUAAAAGA . . . . . AUG
env-284 AAAUA . . . . . AUG
env-285 . . . . . AUG
env-286 AAAAUUUUAAAAGA . . . . . AUG
env-287 AAAAUUUUAAAAGA . . . . . AUG
env-288 . . . . . AUG
env-289 AAAAUUUUAAAAGA . . . . . AUG
env-290 AAAUA . . . . . AUG
env-291 AAAAUUUUAAAAGA . . . . . AUG
env-292 AAAAUUUUAAAAGA . . . . . AUG
env-293 AAAAUUUUAAAAGA . . . . . AUG
env-294 AAAAUUUUAAAAGA . . . . . AUG
env-295 AAUUUUUAAAAGA . . . . . AUG
env-296 AAUUUUUAAAAGA . . . . . AUG
env-297 AAUUUUUAAAAGA . . . . . AUG
env-298 AAUUUUUAAAAGA . . . . . AUG
env-299 AAUUUUUAAAAGA . . . . . AUG
Dsp-2-1 UUUAAAAA . . . . . AUG
env-300 AAUUUUUUAAAAGAAA . . . . . AUG
env-301 AAUUUUUAAAACA . . . . . AUG
env-302 AAAUUUUUAAAACA . . . . . AUG
env-303 AAAUUUUUAAAACA . . . . . AUG
env-304 AAAUUUUUAAAACA . . . . . AUG
env-305 AUAAAAA . . . . . AUG
Dca-1-1 UUUAAAAA . . . . . AUG
env-306 UAAUAAAAAUAAUA . . . . . AUG
env-307 UAAUAAAAAUAAUA . . . . . AUG
Bpy-2-1 AAUUUUUAAAAGAA . . . . . AUG
env-308 AAUUUUUAAAAGAA . . . . . AUG
Bpy-1-1 AAUUUUUAAAAGAA . . . . . AUG
env-309 AAUAAUAGAAAAAA . . . . . AUG
env-310 AUUUUUAAA . . . . . AUG
env-311 AAUUUUUAAAAGAA . . . . . AUG
env-312 AAUUUUUAAAAGAA . . . . . AUG
env-313 AAUUUUUAAAAGAA . . . . . AUG
env-314 AAUUUUUAAAAGAA . . . . . AUG
env-315 AAAUUUUUAAAAGAA . . . . . AUG
env-316 AAUUUUUAAAAGAA . . . . . AUG
env-317 AAAUUUUUAAAAGAA . . . . . AUG
env-318 AAUUUUUAAAAGAA . . . . . AUG

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Rbi-1-1	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	<i>Robiginitalea biformata</i> HTCC2501
Fba-3-1	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	bacterium	HTCC2170
Ale-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Algibacter lectus</i>
Aat-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina atlantica</i>
Ace-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Arenibacter certesii</i> DSM 19833
Ala-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Arenibacter latericius</i> DSM 15913
Cca-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga canimorsus</i>
Cca-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga canis</i>
Ccy-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga cynodegmi</i>
Csp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga sp. oral taxon 335 str.</i> F0486
Csp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga sp. oral taxon 863 str.</i> F0517
Cal-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga algicola</i> DSM 14237
Cba-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga baltica</i> NN016038
Cly-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga lytica</i> DSM 7489
Csp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga sp. Hel.I.12</i>
Ddo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Dokdonia donghaensis</i> DSW-1
Dsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Dokdonia sp. MED134</i>
Ead-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Eudoraea adriatica</i> DSM 19308
Fic-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flaviramus ichthyoenteri</i> Th78
Fba-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	bacterium P7-3-5
Fch-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium chungangense</i> LMG 26729
Fda-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium daejeonense</i> DSM 17708
Ffr-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium frigidarium</i> DSM 17623
Ffr-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium frigidum</i> PS1
Fgi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium gilvum</i>
Fhy-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium hydatis</i>
Fin-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium indicum</i> GPTSA100-9
Fps-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium psychrophilum</i>
Fre-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium reichenbachii</i>
Fsa-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium sasangense</i> DSM 21067
Fsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium sp. ABG</i>
Fsp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium sp. ACAM 123</i>
Fsp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium sp. FI</i>
Fsp-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium sp. JRM</i>
Fsp-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium sp. KJJ</i>
Fsp-6-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium sp. MEB061</i>
Fsu-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium succinicans</i> LMG 10402
Fte-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium tegetincola</i> DSM 22377
Fag-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Formosa agariphila</i> KMM 3901
Gsa-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gaetbulibacter saemankumensis</i> DSM 17032
Gme-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gehidibacter mesophilus</i> DSM 14095
Gli-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia limnaea</i> DSM 15749
Gsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia sp. CAL575</i>
Gsp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia sp. CBA3202</i>
Gsp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia sp. Hel.I.29</i>
Gsp-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia sp. JM1</i>
Gec-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gramella echinicola</i> DSM 19838
Gpo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gramella portivictoriae</i> DSM 23547
Jpa-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Jejuia pallidulitea</i>
Jma-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Joostella marina</i> DSM 19592
Kje-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Kordia jejudonensis</i>
Lsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Lacinutrix sp. Hel.I.90</i>
Lsp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Leeuwenhoekella sp. Hel.I.48</i>
Man-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Maribacter antarcticus</i> DSM 21422
Mfo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Maribacter forsetii</i> DSM 18668
Msp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Maribacter sp. Hel.I.7</i>
Mth-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Maribacter thermophilus</i>
Mze-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Mesoflavibacter zeaxanthinifaciens</i> DSM 18436
Mze-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Mesoflavibacter zeaxanthinifaciens</i> S86
Mlu-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Muricauda lutaonensis</i>
Mru-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Muricauda ruestringensis</i> DSM 13258
Msp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Muricauda sp. MAR.2010.75</i>
Nul-1-1 to Nul-1-4	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Nonlabens ulvanivorans</i>
Oma-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Olleya marilimosa</i> CAM030
Osp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Olleya sp. VCSA23</i>

Osp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Olleya sp.</i> VCSM12
Psp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Polaribacter sp.</i> Hel1_85
Psp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Polaribacter sp.</i> Hel1_88
Psp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Polaribacter sp.</i> MED152
Pgo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroflexus gondwanensis</i> ACAM 44
Pto-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroflexus torquis</i> ATCC 700755
Ptr-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroflexus tropicus</i> DSM 15496
Pja-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroserpens jangbogonensis</i>
Pme-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroserpens mesophilus</i>
Ssp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Salegentibacter sp.</i> Hel1.6
Ssp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Sediminibacter sp.</i> Hel1.10
Sze-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Siansivirga zeaxanthinifaciens</i> CC-SAMT-1
Tna-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tamlana nanhaiensis</i>
Tov-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tenacibaculum ovolyticum</i> DSM 18103
Zga-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Zobellia galactanivorans</i>
Zul-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Zobellia uliginosa</i>
env-1 to env-841	environmental samples					

15.2 Gene contexts

Each S4-Flavobacteria RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one S4-Flavobacteria RNA are assigned a color; other domains are gray. Information about these conserved

domains is given in Section 15.3. The accession of the sequence containing each S4-Flavobacteria RNA is given in the column named “Seq. accession”. Accessions beginning with “NC.”, “NS.”, “NW.” or “NZ.” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each S4-Flavobacteria RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 15.1.

abbrev.	Seq. accession		5′ at	3′ at	genes
env-1	JCVLSCAF_1096627086414	+	372	420	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)→
env-2	JCVLSCAF_1096626661165	+	1143	1191	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-3	TrichMG.c101151	-	3047	3010	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→ CPSase_sm_chain (smart01097)CPSase_sm_chain (pfam00988)→
env-4	KGLS1_ANT02_95m.c10350754	+	179	224	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-5	CESE01138582.1	+	526	571	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-6	CESE01260814.1	+	526	571	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-7	JGI20154J14316_10002684	+	5028	5073	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-8	CENR01029873.1	-	14623	14578	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→
env-9	PML_READ_00292105	-	291	246	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-10	CETR01015277.1	-	2393	2348	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-11	JGI24723J26617_10003273	+	8066	8111	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-12	DelMOSum2010.c10014645	-	2436	2391	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-13	2236876010_0077995	+	182	227	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-14	2236876010_0613686	+	157	202	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→ rpsD (PRK05327)→
env-15	DelMOSum2011.c10012933	+	1809	1854	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
env-16	2236876010_0135624	+	280	325	RNA→

env-17	2236876011_290389	-	127	82	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-18	JGI20152J14361_10041961	-	729	684	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-19	JGI20152J14361_10060010	+	800	845	RNA →
env-20	JGI20152J14361_10066480	+	773	818	RNA →
env-21	2236876009_001520	-	435	389	RNA → S4 (smart00363)RpsD (COG0522) →
env-22	2236876010_0329218	-	266	218	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-23	P_1C_Liq_1_UnCty_1010446	+	1314	1348	RNA →
env-24	P_2C_Liq_1_UnCty_1056530	+	207	251	RNA → RpsD (COG0522)rpsD (PRK05327) →
Nul-1-1	NZ_BB MJ01000004.1	-	87420	87376	RNA → RpsD (COG0522)rpsD (PRK05327) → hypo → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → hypo → hypo → CarA (COG0505)PRK12564 (PRK12564) → hypo → hypo →
Nul-1-2	NZ_BB NT01000002.1	-	87529	87485	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) →
Nul-1-3	NZ_BB MK01000003.1	+	230947	230991	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → hypo → hypo →
Fba-1-1	NZ_CH 672374.1	-	1074107	1074063	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) →
Nul-1-4	NZ_BB MM01000006.1	+	108642	108686	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → hypo → hypo → eno (PRK00077)enolase (cd03313) →
env-25	P_2C_Liq_1_UnCty_1000014	-	67042	66997	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) →
env-26	2210087396	+	206	248	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-27	2210711694	+	456	488	RNA →
env-28	CEVW01139398.1	+	983	1023	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-29	JCVL_SCAF_1096628258595	-	518	478	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-30	CERR01133960.1	-	144	104	RNA → rps4 (CHL00113)rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-31	JCVL_READ_1101740017077	+	208	256	RNA → RpsD (COG0522)rpsD (PRK05327) →
Ddo-1-1	NZ_JSAQ01000001.1	+	2692094	2692135	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Dsp-1-1	NZ_CP 009301.1	+	2792470	2792511	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-32	CEWG01194218.1	+	1094	1136	RNA →
env-33	JCVL_SCAF_1096626222411	+	324	368	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-34	LPjun09P1210m_c1017679	-	357	314	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-35	CESI01021004.1	-	629	586	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-36	CERI01207796.1	+	53	96	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-37	CERM01149072.1	-	47	14	RNA →
env-38	DelMOSum2010_c10216602	+	506	549	RNA → rpsD (PRK05327) →
env-39	CESU01140860.1	-	526	483	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-40	LPaug08P2610m_c1036481	-	442	399	RNA → S4 (smart00363)RpsD (COG0522) →
env-41	JGI20160J14292_10002802	+	11050	11093	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CPSase_sm_chain (smart01097)CPSase_sm_chain (pfam00988) →

env-42	CENJ01167914.1	+	816	859	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → GH25_muramidase (cd00599)Glyco_25 (smart00641) → monomer_idh (TIGR00178)IDH (pfam03971) →
env-43	CEWK01129157.1	-	675	632	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-44	CENG01098372.1	+	851	894	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-45	JCVL_SCAF_1101668543230	-	496	453	RNA → S4 (smart00363)RpsD (COG0522) →
env-46	DelMOSum2010_c10000017	-	35841	35798	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → GH25_muramidase (cd00599)Glyco_25 (smart00641) → monomer_idh (TIGR00178)IDH (pfam03971) →
env-47	DelMOSum2010_c10109581	-	317	274	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-48	JCVL_SCAF_1096627396816	-	557	514	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-49	2236876001_514958	-	290	247	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-50	SI34jun09_10m_1018348	+	1056	1099	RNA → rpsD (PRK05327) →
env-51	CESJ01081808.1	-	167	124	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-52	CESP01137938.1	-	184	141	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-53	CESQ01357094.1	+	349	392	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-54	CESU01004307.1	+	415	458	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-55	JCVL_SCAF_1096627372950	+	1399	1442	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) →
env-56	SR_TTP_S3_1005704	+	528	487	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-57	CENQ01142578.1	+	1112	1153	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) →
env-58	JCVL_SCAF_1096627751190	+	390	431	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-59	SI34jun09_10m_1026568	+	377	426	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-60	2236876010_0420853	-	113	64	RNA → ← hypO
env-61	CERM01058458.1	+	47	8	RNA →
env-62	CESF01120564.1	+	2547	2596	RNA →
env-63	DelMOWin2010_c10006726	-	4916	4867	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol.A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-64	2236876003_095850	+	200	249	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-65	JGI20151J14362_10198578	-	460	411	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-66	DelMOSum2011_c10006805	+	2258	2307	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-67	CERM01027048.1	-	54	15	RNA →
env-68	SA_S1_NOR05_45m_c10094569	-	509	460	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-69	CESJ01125754.1	-	683	634	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-70	JCVL_SCAF_1096627289576	+	1243	1292	RNA → S4 (smart00363)RpsD (COG0522) →
env-71	SI54feb11_120m_c1075046	+	205	254	RNA →
env-72	DelMOSum2010_c10001162	-	9097	9048	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol.A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-73	LPaug09P1610m_c1010800	-	1174	1132	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-74	JGI20157J14317_10009143	+	851	893	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol.A_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) →
env-75	DelMOSum2010_c10023112	+	1855	1897	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol.A_CTD (pfam03118) →
env-76	JGI20154J14316_10037599	+	554	596	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol.A_CTD (pfam03118) →
env-77	LPaug09P1610m_c1025405	+	502	545	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →

env-78	CESF01024170.1	+	3852	3895	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → gltA (PRK05614)EcCS_like (cd06114) →
env-79	CESI01111408.1	-	294	251	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-80	CEVX01268119.1	-	403	360	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-81	CEOP01127922.1	-	573	530	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-82	CENT01082708.1	+	1142	1185	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-83	CERI01005517.1	+	12209	12252	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → GATase1_CPSase (cd01744)PRK12564 (PRK12564)CPSase_sm_chain (pfam00988) →
env-84	NCBI_BBAY_READ_1105731223526	-	451	408	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-85	JCVL_SCAF_1096626910973	+	1202	1246	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-86	CENJ01088625.1	-	632	588	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-87	JGI20151J14362_10002063	+	4119	4163	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591)rpsP (PRK14521) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → gltA (PRK05614)EcCS_like (cd06114) →
env-88	JCVL_SCAF_1096627345251	+	852	896	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-89	CENU01250245.1	-	488	444	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-90	JCVL_SCAF_1101668117291	+	939	982	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-91	NCBI_READ_1112493636597	-	239	197	RNA →
env-92	NCBI_READ_1112637788282	+	45	87	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-93	DelMOSum2011_c10065322	+	1218	1261	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-94	DelMOSum2010_c10001866	+	12778	12821	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)Enolase_N (pfam03952) →
env-95	DelMOSum2010_c10000646	-	20267	20225	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → gltA (PRK05614)EcCS_like (cd06114) →
env-96	CERI01138193.1	+	441	483	RNA →
env-97	JGI20157J14317_10000863	-	19631	19589	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CPSase_sm_chain (smart01097)CPSase_sm_chain (pfam00988) →
env-98	CETY01154757.1	-	449	405	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-99	JCVL_SCAF_1096627797848	+	643	687	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → S4 (smart00363)RpsD (COG0522) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-100	CERI01106383.1	-	1156	1112	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-101	JGI20156J14371_10258465	-	393	349	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-102	JGI20156J14371_10000849	-	14189	14147	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-103	JCVL_SCAF_1101668015840	-	1336	1289	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-104	CESW01058310.1	-	375	328	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-105	CEQI01167214.1	+	466	513	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-106	KGI_S2_ANT04_2345m_c1444089	+	66	115	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-107	KGI_S1_ANT01_95m_c10042760	-	553	504	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-108	JGI24025J20009_10098185	-	82	33	RNA →
env-109	SA_S1_NOR05_45m_c10522404	-	164	115	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-110	SA_S2_NOR15_50m_c10034879	+	1070	1119	RNA → RpsD (COG0522)rpsD (PRK05327) →

env-111	KGLS1_ANT01.95m.c10014341	-	2364	2315	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-112	SA_S1_NOR08.45m.c10025816	-	1459	1410	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-113	JGI25923J51411.1187453	-	75	35	RNA →
env-114	LWFCAn_GLQU6AQ01D6DBV	-	91	51	RNA →
env-115	CEUH01136830.1	+	421	461	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) →
env-116	JGI24768J34885.10100695	-	432	392	RNA → S4 (smart00363)RpsD (COG0522) →
env-117	JGI25924J51412.1020305	-	684	644	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-118	CEPL01069899.1	-	397	357	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-119	CEUU01249842.1	+	1479	1519	RNA → S4 (smart00363)RpsD (COG0522) →
env-120	JGI12421J11937.10021494	+	1953	1993	RNA → S4 (smart00363)RpsD (COG0522) →
env-121	JGI24768J34885.10000210	+	12918	12958	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol.A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-122	JGI25914J50564.10010364	-	2244	2204	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol.A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-123	JGI12421J11937.10125481	-	368	328	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-124	JGI20156J14371.10002312	+	12798	12838	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-125	M3P_c10141944	+	153	193	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-126	JGI25914J50564.10045055	-	818	778	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) →
env-127	DelMOSum2010.c10006624	-	704	664	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-128	JGI25920J50251.10092017	-	50	20	RNA →
env-129	DelMOSum2010.c10002074	-	11710	11668	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → PLN02967 (PLN02967)RplQ (COG0203)rplQ (PRK05591) →
env-130	CESA01021238.1	-	2261	2219	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-131	NCBI_BBAY_READ.1106105275911	-	208	155	RNA →
env-132	CENG01041113.1	+	3621	3663	RNA →
env-133	CESF01027428.1	-	816	774	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) →
env-134	CEWG01153018.1	+	405	447	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-135	CETE01270809.1	-	1047	1005	RNA → RpsD (COG0522)rpsD (PRK05327) → rpoA (CHL00013)PRK05182 (PRK05182) →
env-136	CEUH01072115.1	-	421	379	RNA → S4 (smart00363)RpsD (COG0522) →
env-137	CESI01305241.1	-	2124	2082	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-138	JCVL_SCAF.1101668716688	+	592	634	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-139	2236876001.320422	+	288	342	RNA →
env-140	2236876001.014240	+	85	44	RNA →
env-141	2236876001.374803	-	19	60	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-142	2236876001.181177	-	254	213	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-143	JGI20156J14371.10000248	+	11432	11480	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-144	JGI20154J14316.10020138	-	582	534	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-145	JGI20157J14317.10238135	-	207	166	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-146	ElkS_mat_MD6A.1006090	+	1597	1645	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-147	DelMOSum2010.c10001012	+	14798	14841	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol.A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → GATaseL_CPSase (cd01744)PRK12564 (PRK12564)CPSase_sm_chain (pfam00988) → eno (PRK00077)enolase (cd03313) →
env-148	JGI20159J14440.10208187	-	331	288	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →

env-149	JGI20160J14292_10003529	-	10322	10279	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → GATase1_CPSase (cd01744)PRK12564 (PRK12564)CPSase_sm_chain (pfam00988) → eno (PRK00077)enolase (cd03313) →
env-150	JGI20156J14371_10005217	-	7554	7511	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → GATase1_CPSase (cd01744)PRK12564 (PRK12564)CPSase_sm_chain (pfam00988) → eno (PRK00077)enolase (cd03313) →
env-151	JGI20160J14292_10000862	-	24569	24526	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → gltA (PRK05614)EcCS_like (cd06114) →
env-152	JGI20152J14361_10001272	+	11027	11070	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-153	2236876001_447696	-	404	361	RNA → S4 (smart00363)RpsD (COG0522) →
env-154	NCBI_READ_1112533167397	-	766	723	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-155	SI34jun09_10m_1127658	+	229	272	RNA → ←-hypo
env-156	JGI20160J14292_10182352	+	404	447	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-157	CESJ01259508.1	-	513	470	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-158	2236876001_073076	+	29	72	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-159	JGI20154J14316_10148802	+	420	463	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-160	SA_S1_NOR08_45m_c10566989	+	97	141	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Lsp-2-1	NZ_JHZY01000004.1	-	470876	470832	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-161	CEVO01222084.1	+	846	880	RNA →
env-162	CESL01055523.1	+	471	515	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-163	CEVJ01029531.1	+	846	890	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-164	CETR01135856.1	+	845	889	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-165	CEOS01000692.1	-	8747	8703	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → hypo → CarA (COG0505)PRK12564 (PRK12564) →
env-166	2236876011_134002	+	294	326	RNA →
env-167	JGI20154J14316_10001276	-	5032	4990	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) →
env-168	2231695257	-	173	131	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-169	JGI25910J50241_10205082	-	41	9	RNA →
Fba-2-1	NZ_AAAX01000001.1	-	580267	580223	RNA → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → RplQ (COG0203)rplQ (PRK05591) →
env-170	M3P_c10252825	+	117	160	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Fsa-1-1	NZ_JMLU01000009.1	-	18897	18854	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-171	JGI25921J50272_10187943	+	186	229	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-172	3300000052_174905	+	114	157	RNA →
env-173	3300001592_10384027	+	364	407	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-174	TB_FS06_10DRAFT_1000051	-	30943	30900	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-175	3300001592_10325872	+	220	263	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-176	CETR01093469.1	+	1000	1048	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-177	CEVJ01168016.1	-	208	160	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-178	CETA01172228.1	-	195	151	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-179	CEVI01047151.1	+	2582	2626	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →

env-180	JGI24815J26687_1079477	+	331	375	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-181	CEUC01056669.1	+	895	939	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-182	CESR01033026.1	+	887	931	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-183	CETO01024088.1	-	1009	965	RNA → RpsD (COG0522)rpsD (PRK05327) → rpoA (CHL00013)PRK05182 (PRK05182) →
env-184	CEUS01122815.1	-	657	613	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-185	CEWR01047726.1	-	680	636	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-186	CETS01039292.1	-	1863	1819	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-187	CEVM01006958.1	-	238	194	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-188	SI54feb11_120m_c1042447	-	137	93	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-189	NCBI_BBAY_READ_1106073052947	-	860	816	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-190	CENT01023057.1	-	131	87	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-191	CEVG01299689.1	+	820	854	RNA →
env-192	JCVL_SCAF_1096627857065	-	1611	1567	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-193	CERI01112825.1	-	699	655	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-194	CEWG01256266.1	-	432	388	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-195	CENG01111780.1	+	9651	9695	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-196	CENG01073265.1	+	732	776	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-197	CETY01269978.1	+	203	247	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-198	CEWG01042362.1	+	503	547	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-199	JCVL_SCAF_1096627052264	-	632	588	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-200	CETK01070832.1	+	5009	5053	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → gltA (PRK05614)EcCS_like (cd06114) →
env-201	JCVL_SCAF_1101667257495	-	457	413	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-202	JGI20157J14317_10000316	-	23037	22993	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → gltA (PRK05614)EcCS_like (cd06114) →
env-203	JGI20156J14371_10020545	-	289	239	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-204	JCVL_SCAF_1096626856226	+	1215	1265	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-205	JGI20159J14440_10001069	-	2266	2216	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-206	DelMOSum2010_c10144771	+	169	218	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-207	SI48aug10_10m_c1005592	-	1044	995	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-208	NCBI_BBAY_READ_1106073039522	-	543	494	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-209	NCBI_READ_1112493604101	+	450	499	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-210	DelMOSum2010_c10000401	-	31221	31172	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591)rne (PRK10811) → hypo →
env-211	JGI20152J14361_10035130	-	700	651	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-212	CEWO01191481.1	+	536	585	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-213	JGI20154J14316_10392850	-	59	20	RNA →
env-214	JGI20160J14292_10012841	-	839	790	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
Jpa-1-1	NZ_BBNS01000014.1	+	75674	75722	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-215	ElkS_mat_MD6A_1048345	-	175	127	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-216	ElkS_mat_MD6A_1011575	-	1844	1796	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-217	ElkS_mat_MD6A_1054401	-	382	334	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-218	JGI20160J14292_10190844	+	186	227	RNA → S4 (smart00363)RpsD (COG0522) →
env-219	JGI12547J11936_1003731	+	2052	2092	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-220	JGI12421J11937_10050354	+	1249	1289	RNA → ←hypo

env-221	Keratinized_gingiva_LANL_C5716438	-	329	287	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-222	SRS017691_Baylor_scaffold_68	+	1241	1283	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-223	SRS018443_Baylor_scaffold_6145	+	2897	2939	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-224	Palatine_Tonsils_LANL_C6151646	-	152	110	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-225	SRS012285_Baylor_scaffold_4163	+	558	600	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-226	SRS016331_WUGC_scaffold_136	-	738	696	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-227	SRS011343_Baylor_scaffold_55324	-	267	225	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-228	SRS011255_Baylor_scaffold_65092	+	718	760	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-229	SRS022602_Baylor_scaffold_81026	-	257	216	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-230	SRS047634_LANL_scaffold_130560	+	829	870	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-231	SRS052876_LANL_scaffold_39269	+	1190	1231	RNA →
env-232	SRS013836_Baylor_scaffold_28602	-	487	446	RNA → RpsD (COG0522)rpsD (PRK05327) →
Csp-1-1	NZ_AKFR01000015.1	-	81600	81559	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-233	SRS014888_WUGC_scaffold_19943	+	291	332	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-234	SRS013723_Baylor_scaffold_19316	+	2562	2603	RNA →
env-235	SRS017511_Baylor_scaffold_85167	+	438	479	RNA →
env-236	SRS017209_C2451925	-	303	262	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-237	Throat_LANL_scaffold_30529	+	70	111	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-238	SRS014573_C3620607	-	364	323	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-239	SRS015989_WUGC_scaffold_3203	+	436	477	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-240	SRS051244_LANL_scaffold_57202	+	436	477	RNA →
env-241	SRS024381_LANL_scaffold_48261	+	437	478	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-242	SRS053630_LANL_scaffold_15954	+	1148	1189	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-243	Buccal_mucosa_LANL_scaffold_33054	+	15	56	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-244	SRS022083_Baylor_scaffold_14787	+	71	112	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-245	SRS022536_LANL_scaffold_45737	+	394	435	RNA →
env-246	SRS049318_LANL_scaffold_22062	-	640	599	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → S4 (smart00363)RpsD (COG0522) → rpsD (PRK05327) →
env-247	SRS011343_Baylor_scaffold_68646	+	588	629	RNA →
env-248	TDF_OR_ARG05_123m.c1010977	-	701	661	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-249	SA_S1_NOR08_45m.c10064607	-	790	750	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-250	TDF_MC_ARG01_113m.c1000650	+	230	270	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-251	SA_S2_NOR13_50m.c1156445	-	121	81	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-252	TDF_OR_ARG04_113m.c1025301	+	530	570	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-253	JGI24723J26617_10208337	-	127	87	RNA →
env-254	TDF_OR_ARG04_113m.c1103690	-	163	123	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-255	BS_KBA_SWE12_21m.c10302711	-	190	150	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-256	JGI24723J26617_10789467	+	66	106	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-257	KGL_S2_ANT05_2345m.c1010433	-	779	739	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182) →
env-258	KGL_S1_ANT01_95m.c10010832	+	492	532	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-259	SA_S2_NOR13_50m.c1000962	+	5215	5255	RNA → RpsD (COG0522)rpsD (PRK05327) → rpoA (CHL00013)PRK05182 (PRK05182) →
env-260	KGL_S1_ANT01_95m.c10110441	+	179	219	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-261	KGL_S1_ANT01_95m.c10085982	+	480	520	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-262	TB_FS06_10DRAFT_1000211	+	18911	18956	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-263	DelMOSum2010_c10125148	-	972	931	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →

env-264	JGI20157J14317_10000116	+	22436	22477	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) →
env-265	JGI20159J14440_10000121	+	30004	30045	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) →
env-266	CESE01008383.1	+	79060	79101	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) →
env-267	JGI20152J14361_10000300	+	3945	3986	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) →
env-268	DelMOSum2011_c10467853	+	40	81	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-269	JGI20156J14371_10000212	-	49678	49637	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) →
env-270	CETE01228191.1	-	644	603	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-271	CEVG01151379.1	+	315	356	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-272	CENO01018210.1	-	657	616	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-273	JCVL_SCAF_1096627080427	+	1062	1103	RNA → RpsD (COG0522)rpsD (PRK05327) → rpoA (CHL00013)PRK05182 (PRK05182) →
env-274	CEUH01222072.1	+	246	287	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-275	SA_S1_NOR08_45m_c10087543	-	795	753	RNA → RpsD (COG0522)rpsD (PRK05327) → hypo →
env-276	JGI20156J14371_10002845	+	7598	7640	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-277	TB_GS09_5_10006339	+	7277	7320	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-278	TB_FS06_10DRAFT_1000970	-	7745	7703	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → hypo → AmyAc_arch_bac_AmyA (cd11313)treS_nterm (TIGR02456) → TIGR00275 (TIGR00275)HI0933_like (pfam03486) → TIGR00275 (TIGR00275)HI0933_like (pfam03486) →
env-279	wf2_AHAA19916_y1	-	435	392	RNA → S4 (smart00363)RpsD (COG0522) →
env-280	JGI20152J14361_10000009	-	112324	112282	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-281	GSLSAAL_GFP0ZZ302IYKTC	-	96	54	RNA → ←hypo
env-282	SL_9KL_010_SED_10016857	+	55	99	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-283	P_1C_Liq_1_UnCty_1074733	-	40	6	RNA →
env-284	JGI11876J14442_10000071	-	34341	34297	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → CarA (COG0505)PRK12564 (PRK12564) →
Pgo-1-1	NZ_APLF01000014.1	-	34253	34209	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → CarA (COG0505)PRK12564 (PRK12564) →
env-285	P_2C_Liq_1_UnCty_1067107	+	546	578	RNA →
env-286	ElkS_mat_CD2A_1181468	+	226	182	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-287	P_1C_Liq_1_UnCty_1015490	+	448	492	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-288	JGI1221J11331_1000639	+	5910	5954	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CPSase_sm_chain (smart01097)CPSase_sm_chain (pfam00988) → PRK12564 (PRK12564)GATase (pfam00117) →
Pto-1-1	NC_018721.1	-	1068584	1068540	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →

Ptr-1-1	NZ_KB905346.1	+	104039	104083	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-289	SA_S1_NOR05_45m_c10375136	+	157	201	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-290	SA_S2_NOR15_50m_c10192611	+	393	437	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-291	SA_S1_NOR05_45m_c10080223	+	427	471	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-292	SL_9KL_010_SED_10000028	-	31849	31807	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-293	SL_7KL_010_BRINE_10000083	+	29384	29426	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Rbi-1-1	NC_013222.1	+	1475311	1475353	GATaseI_CPSase (cd01744)PRK12564 (PRK12564)CPSase_sm_chain (pfam00988) → RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Gfo-1-1	NC_008571.1	-	2932356	2932313	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Gpo-1-1	NZ_KE383971.1	+	95062	95105	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Gec-1-1	NZ_AUHG01000011.1	+	90775	90818	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → hypo → CarA (COG0505)PRK12564 (PRK12564) →
env-294	CENZ01218708.1	-	288	245	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-295	CESL01104349.1	+	2289	2332	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
Fjo-1-1	NC_009441.1	-	396087	396045	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-296	KGI_S1_ANT02_95m_c10161500	-	420	371	RNA → S4 (smart00363)RpsD (COG0522) →
env-297	JGI24023J19991_10010536	+	3459	3508	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-298	2236876001_453531	-	209	161	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-299	DelMOSum2010_c10108153	-	712	664	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-300	JGI20154J14316_10182624	-	93	45	RNA →
env-301	JGI20154J14316_10239595	-	85	37	RNA →
env-302	JGI20160J14292_10255730	+	444	482	RNA →
env-303	CESI01041543.1	+	405	453	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-304	DelMOSum2010_c10015854	-	4138	4090	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-305	JGI20154J14316_10192329	-	65	24	RNA →
env-306	DelMOSum2010_c10003210	+	452	500	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-307	DelMOSum2010_c10379381	+	340	378	RNA →
env-308	DelMOSum2010_c10492344	-	94	46	RNA →
env-309	JGI20154J14316_10188950	-	67	24	RNA →
env-310	JGI20160J14292_10241200	+	448	486	RNA →
env-311	JGI20153J14295_10182765	+	414	461	RNA →
env-312	CESU01090380.1	+	400	448	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-313	JGI20154J14316_10183818	-	76	28	RNA →
env-314	JGI20154J14316_10249246	+	339	386	RNA →
env-315	DelMOSum2011_c10107659	+	808	856	RNA →
env-316	KGI_S1_ANT02_95m_c10000070	-	9736	9688	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-317	DelMOSum2011_c10000248	-	37631	37583	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → hypo → CarA (COG0505)PRK12564 (PRK12564) →

env-318	JGI20157J14317_10074550	-	1039	991	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-319	JGI20157J14317_10082923	+	461	509	RNA → RpsD (COG0522)rpsD (PRK05327) →
Tna-1-1	NZ_JTDDV01000011.1	-	67639	67591	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → hypo → CarA (COG0505)PRK12564 (PRK12564) →
env-320	JGI12097J13213_1000640	-	3883	3835	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-321	NCBI_READ_1112290411083	-	940	901	RNA → rpsD (PRK05327) →
env-322	SRS024087_LANL_scaffold_26415	+	693	733	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-323	SRS022602_Baylor_scaffold_55726	-	1590	1550	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-324	SRS011343_C2229337	-	665	625	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-325	SRS064449_LANL_scaffold_29232	-	83	43	RNA →
env-326	KGL_S1_ANT01_95m_c10069223	+	445	488	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-327	KGL_S1_ANT01_95m_c10437516	+	51	94	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-328	KGL_S1_ANT01_95m_c10191473	-	99	56	RNA →
env-329	KGL_S1_ANT02_95m_c10154153	-	555	512	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-330	KGL_S1_ANT02_95m_c10018669	-	104	61	RNA →
env-331	JGI1221J11331_1000195	-	5494	5451	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
Gli-1-1	NZ_JH594606.1	-	1313497	1313454	RNA → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591)Mtc1 (pfam10310) →
env-332	ElkS_mat_MD6A_1190446	+	69	109	RplQ (COG0203)rplQ (PRK05591)Mtc1 (pfam10310) →
env-333	JGI1221J11331_1000080	+	24062	24105	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Aat-1-1	NZ_AQRA01000007.1	+	133451	133494	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-334	JGI11876J14442_10876046	-	214	174	RplQ (COG0203)rplQ (PRK05591) →
Gsp-3-1	NZ_JQLP01000005.1	+	613543	613586	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-335	KGL_S1_ANT01_95m_c10674661	+	62	105	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-336	KGL_S1_ANT01_95m_c10076701	+	615	572	RplQ (COG0203)rplQ (PRK05591) →
env-337	KGL_S1_ANT01_95m_c10067832	-	463	506	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-338	KGL_S2_ANT04_2345m_c1337795	-	82	39	RNA →
env-339	KGL_S1_ANT02_95m_c10321982	+	98	141	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-340	KGL_S1_ANT02_95m_c10332312	+	96	139	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Gsp-4-1	NZ_KE384219.1	-	887176	887133	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Gsp-2-1	NZ_AJLT01000027.1	-	3532	3489	RNA → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → RplQ (COG0203)rplQ (PRK05591) →
env-341	ElkS_mat_MD6A_1172629	+	144	187	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-342	CEVI01208716.1	-	665	622	RNA → RpsD (COG0522)rpsD (PRK05327) →
Ssp-1-1	NZ_JQNQ01000001.1	+	2652711	2652754	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Kal-1-1	NZ_DS544873.1	-	2713104	2713064	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Gsp-1-1	NZ_APHJ01000040.1	-	65659	65616	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-343	P_1C_Liq_3_UnCty_1004385	-	1057	1016	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-344	P_1C_Liq_1_UnCty_1000030	-	6951	6910	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-345	JGI25913J50563_1051608	+	106	147	RNA → RpsD (COG0522)rpsD (PRK05327) →

env-346	ABOG01001487.1	-	91	50	RNA → hypo →
env-347	2204886463	-	72	31	RNA →
env-348	GSLAS_GLMUJHB02GRDZW	-	120	79	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-349	JGI24770J26754_10034354	+	1291	1332	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
Fin-1-1	NC_017025.1	+	672442	672483	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-350	JGI25920J50251_10035976	-	1266	1225	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-351	P_2C_Liq_2_UnCty_1074319	+	58	98	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-352	DelMOSum2010_c10001779	-	4923	4883	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-353	DelMOWin2010_c10201283	-	365	325	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-354	ABOE01005844.1	-	55	25	RNA → ←hypo
env-355	P_2C_Liq_1_UnCty_1005695	-	2283	2243	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-356	CENG01018837.1	-	3006	2965	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → hypo →
env-357	CENP01317983.1	+	486	527	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-358	CENW01033667.1	+	574	605	RNA → hypo →
env-359	CEOP01025191.1	-	597	556	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-360	CEPL01236006.1	-	586	545	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-361	CERK01003498.1	-	2219	2178	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591)rpsP (PRK14521) →
env-362	CESZ01017440.1	+	239	280	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-363	CETQ01116547.1	+	277	318	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-364	CEUG01164120.1	+	218	259	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-365	CEVL01101790.1	+	577	618	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-366	CEVU01164851.1	-	2198	2157	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-367	CEWG01182900.1	+	735	776	RNA →
env-368	CEWK01130899.1	-	556	515	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-369	JCVL_SCAF_1101668693344	-	606	566	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-370	JCVL_SCAF_1096626974148	-	920	879	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-371	CENQ01077134.1	-	192	151	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-372	CEOM01200204.1	+	808	849	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-373	CEQX01059206.1	-	38	7	RNA →
env-374	CESP01186676.1	+	437	478	RNA →
env-375	CEUA01031995.1	+	888	929	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-376	CEVG01008164.1	+	288	329	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-377	CEVR01251554.1	+	296	337	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-378	CEVX01164589.1	+	416	457	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-379	CEWO01084334.1	+	5393	5434	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-380	CEOV01038829.1	-	255	212	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-381	CEQ01099035.1	+	406	449	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-382	CEQ001051374.1	+	920	963	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-383	CESQ01024469.1	+	341	384	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-384	CEUM01272025.1	+	217	260	RNA → RpsD (COG0522)rpsD (PRK05327) →

env-385	JCVL_READ_1103770020066	-	619	576	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-386	CESD01077857.1	-	283	240	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-387	CETB01090522.1	-	501	458	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-388	JCVL_READ_1103769862037	-	370	327	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-389	JCVL_SCAF_1096627876296	+	547	588	RNA → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) →
env-390	JCVL_SCAF_1101668435598	+	664	705	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-391	JCVL_SCAF_1096627108452	-	156	115	RNA →
env-392	CENJ01155291.1	-	444	403	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-393	CENT01170625.1	-	233	192	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-394	CENY01156917.1	+	415	456	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182) →
env-395	CEPC01245844.1	+	902	933	RNA → hypo →
env-396	CEQO01025468.1	+	291	332	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-397	CESN01038593.1	-	2422	2381	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-398	JCVL_SCAF_1096627965867	+	486	527	RNA → S4 (smart00363)RpsD (COG0522) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-399	CETY01194632.1	+	6186	6227	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-400	CEVG01161451.1	+	1799	1840	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-401	CEVP01363226.1	+	1728	1769	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-402	CEVX01015396.1	+	5254	5295	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-403	JCVL_SCAF_1096627738902	-	327	286	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-404	JCVL_SCAF_1096627987680	+	87	128	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-405	JCVL_SCAF_1101668751912	-	811	770	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-406	CENP01173649.1	+	17909	17950	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → hypo → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → gltA (PRK05614)Citrate_synt (pfam00285) → DdaH (COG1834) → Amidinotransf (pfam02274) → Arg_tRNA_synt_N (smart01016)Arg_tRNA_synt_N (pfam03485) →
env-407	CENX01050295.1	-	973	932	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-408	CEPW01055046.1	+	441	482	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-409	CESF01181460.1	-	96	55	RNA →
env-410	CETY01166093.1	+	795	836	RNA →
env-411	CEUN01220636.1	+	306	347	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-412	CEVP01121720.1	-	660	619	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-413	CEVW01163295.1	-	43	12	RNA →
env-414	CEWH01074398.1	+	631	672	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-415	85126595	-	708	665	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-416	CEQM01038432.1	-	514	471	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-417	CEQW01046056.1	-	288	245	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-418	CESF01121287.1	+	799	842	RNA →
env-419	CEUF01015480.1	+	459	502	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-420	CAM_READ_0234809867	-	478	435	RNA → S4 (smart00363)RpsD (COG0522) →
env-421	CENF01049817.1	+	70	113	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-422	CESW01020303.1	+	802	845	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-423	CEUH01049850.1	+	363	406	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-424	JCVL_SCAF_1096627517448	-	1401	1360	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-425	JCVL_SCAF_1101668741877	-	1146	1105	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-426	JGI20153J14295_10198722	+	211	255	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-427	SA_S1_NOR05_45m_c10264163	+	183	227	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-428	SI60aug11_100m_c1216415	-	37	5	RNA →
env-429	SI34jun09_10m_1002524	-	5240	5198	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-430	JGI1221J11331_1019349	-	1294	1245	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-431	P_2C_Liq_1_UnCty_1022676	+	198	240	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →

env-432	SA_S1_NOR08_45m.c10303734	-	256	213	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-433	JGI24025J20009_10186048	-	381	339	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-434	TDF_OR_ARG04_113m.c1035950	-	334	292	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-435	TDF_MC_ARG02_113m.c1087976	+	171	213	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-436	KGL_S1_ANT02_95m.c10052129	+	703	745	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-437	P_2C_Liq_1_UnCty_1009183	+	649	691	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-438	CESF01214207.1	+	538	580	RNA → ←-hypo
env-439	PML_READ_00354242	+	42	84	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-440	KGL_S2_ANT04_2345m.c1245894	-	300	258	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-441	KGL_S1_ANT02_95m.c10002151	-	4971	4929	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-442	JGI24724J26744_10001772	+	14502	14544	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-443	KGL_S1_ANT01_95m.c10016085	-	758	716	RNA → RpsD (COG0522)rpsD (PRK05327) → hypo →
env-444	KGL_S1_ANT03_95m.c1000649	-	2219	2177	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-445	SI48aug10_10m.c1075429	+	155	197	RNA →
env-446	JGI20152J14361_10073408	-	103	61	RNA → ←-hypo
env-447	JGI24023J19991_10048106	-	1743	1701	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-448	SA_S1_NOR05_45m.c10501087	+	134	176	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-449	KGL_S2_ANT05_2345m.c1026215	-	758	716	RNA → RpsD (COG0522)rpsD (PRK05327) → hypo →
env-450	JGI24025J20009_10005367	-	6255	6213	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
Fba-3-1	NC_014472.1	-	807022	806980	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → eno (PRK00077)enolase (cd03313) →
env-451	SA_S1_NOR08_45m.c10423185	+	103	145	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-452	SA_S1_NOR08_45m.c10214572	+	57	99	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-453	JGI20156J14371_10031151	+	222	264	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-454	NCBI_READ_1112777383475	-	732	690	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-455	NCBI_READ_1112788432221	-	789	747	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-456	NCBI_READ_1112494047845	+	599	641	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-457	2236876010_0236984	-	372	324	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-458	JGI20160J14292_10208151	+	144	192	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-459	JGI20155J14468_10404061	-	156	108	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-460	SA_S1_NOR08_45m.c10274690	+	87	129	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-461	2236876010_0455091	-	371	329	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-462	2236876010_0562821	-	158	116	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-463	DelMOWin2010_c10188673	-	373	331	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-464	SA_S1_NOR02_45m.c1174201	-	144	102	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-465	JCVL_SCAF_1096626910919	-	950	908	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-466	DelMOSum2010_c10659421	-	71	29	RNA →
env-467	2236876010_0311705	+	440	472	RNA →
env-468	2236876010_0138022	+	324	366	RNA →
env-469	2236876010_0157521	+	63	105	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-470	SA_S1_NOR05_45m.c10203477	+	305	347	RNA → ←-hypo
env-471	JGI20157J14317_10005668	-	2515	2473	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-472	CEWR01000864.1	+	572	614	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-473	2236876010_0363029	+	290	332	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-474	2236876010_0242303	+	265	307	RNA →

env-475	2236876010_0101955	-	172	130	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-476	DelMOSum2011_c10001719	-	610	568	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-477	SA_S1_NOR05_45m_c10530560	-	224	182	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-478	DelMOSum2011_c10529643	-	209	167	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-479	JGI20156J14371_10646125	-	87	45	RNA →
Psp-1-1	NZ_LJPSD01000002.1	+	1347599	1347641	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → hypo →
env-480	2236876010_0517953	-	211	169	RNA → hypo →
env-481	2236876010_0238370	-	424	382	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → S4 (smart00363)RpsD (COG0522) →
env-482	2236876010_0136465	-	50	18	RNA → hypo →
env-483	SI60aug11_200m_c1106132	-	340	298	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-484	CERM01023755.1	+	1651	1693	RNA → RpsD (COG0522)rpsD (PRK05327) → hypo →
Tov-1-1	NZ_AUMF01000009.1	-	79066	79024	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-485	2236876010_0403020	+	10	52	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → hypo →
env-486	CEPZ01013735.1	-	141998	141956	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → hypo → CarA (COG0505)PRK12564 (PRK12564) →
env-487	KGI_S2_ANT04_2345m_c1133551	-	346	304	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-488	SA_S1_NOR05_45m_c10020030	+	1304	1346	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-489	JGI20152J14361_10000017	+	7046	7088	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-490	DelMOSum2011_c10004810	-	4239	4197	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-491	JGI20154J14316_10079454	-	235	193	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Kje-1-1	NZ_LBMG01000016.1	-	14572	14530	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-492	KGI_S1_ANT01_95m_c10057790	-	1051	1009	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-493	JGI20160J14292_10195876	-	317	275	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Psp-2-1	NZ_JHZZ01000001.1	-	237303	237261	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-494	JGI20154J14316_10123778	+	416	458	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-495	JGI20157J14317_10556627	+	133	175	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-496	2236876010_0174516	-	142	100	RNA →
env-497	BS_KBA_SWE12_21m_c10001102	+	2457	2499	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → hypo → CarA (COG0505)PRK12564 (PRK12564) →
env-498	CESE01006475.1	-	1107	1065	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-499	wf3_Contig994	-	742	700	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-500	SA_S2_NOR13_50m_c1005577	-	652	610	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-501	P_2C_Liq_1_UnCty_1273058	-	86	45	RNA →
env-502	P_2C_Liq_3_UnCty_100504	+	604	645	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-503	P_2C_Liq_3_UnCty_100665	-	8850	8809	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-504	KGI_S1_ANT01_95m_c10123548	+	293	341	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-505	JGI11876J14442_10581827	+	196	237	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-506	JGI24023J19991_10009789	-	99	58	RNA →
env-507	JGI24023J19991_10077987	+	1088	1129	RNA →
env-508	JGI24023J19991_10260636	-	75	34	RNA →
env-509	JGI24723J26617_10023895	-	2577	2536	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) → PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → PRK12564 (PRK12564)CPSase_sm_chain (pfam00988) →
env-510	JGI24723J26617_10679119	-	223	182	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-511	SRS022602_Baylor_scaffold_12322	+	70	111	RNA → RpsD (COG0522)rpsD (PRK05327) →

env-512	ASA120_GJFD58A02GLQWA	+	249	290	RNA → ←-hypo
Mze-2-1	NZ_AFOE01000041.1	+	7910	7951	RNA → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → CarA (COG0505)PRK12564 (PRK12564) →
Csp-2-1	NZ_KE992086.1	+	67634	67675	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Man-1-1	NZ_KK211214.1	+	408244	408285	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → CarA (COG0505)PRK12564 (PRK12564) →
Msp-1-1	NZ_JHZW01000002.1	-	322870	322829	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-513	CEVF01017747.1	+	20379	20420	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-514	LAZR01000718.1	+	21183	21224	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-515	JGI11876J14442_10577013	-	154	113	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-516	JGI24023J19991_10007103	-	261	220	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-517	JGI24023J19991_10074980	-	367	326	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-518	JGI24023J19991_10226678	-	76	35	RNA →
env-519	JGI24723J26617_10030345	+	1847	1888	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-520	JGI24723J26617_10764797	+	51	92	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-521	SRS055378_LANL_scaffold_51092	-	215	174	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Csp-3-1	NZ_JUHB01000001.1	-	1541536	1541495	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
Cba-1-1	NZ_CP009887.1	-	225786	225745	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
Mlu-1-1	NZ_CP011071.1	-	769099	769058	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
Msp-2-1	NZ_JQNJ01000001.1	-	660265	660224	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-522	KGL_S1_ANT01_95m_c10061602	-	1117	1069	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-523	KGL_S1_ANT01_95m_c10514893	+	216	264	RNA →
env-524	SA_S2_NOR13_50m_c1195435	+	57	105	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-525	SA_S1_NOR08_45m_c10507688	+	279	317	RNA →
env-526	SA_S1_NOR08_45m_c10126322	+	241	289	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-527	KGL_S2_ANT04_2345m_c1034044	+	979	1027	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-528	SA_S1_NOR02_45m_c1006351	-	213	165	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-529	ElkS_mat_MD6A_1003011	-	1378	1330	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-530	CESG01186264.1	+	76	124	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-531	JGI24023J19991_10302847	+	95	143	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Ale-1-1	NZ_BBNQ01000011.1	-	90098	90050	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fag-1-1	NZ_HG315671.1	+	689063	689111	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Osp-1-1	NZ_JADS01000010.1	+	109557	109605	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-532	CENJ01244751.1	-	131	90	RNA →

env-533	KGLS1_ANT01.95m_c10140035	+	608	646	RNA→
env-534	SA_S1_NOR08_45m_c10026887	-	62	24	RNA→
env-535	SA_S1_NOR08_45m_c10548832	-	224	176	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-536	SA_S2_NOR15_50m_c10053365	+	1565	1613	RNA→ ←-hypo
env-537	JGI24024J18818_10001114	+	7715	7763	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→ PRK12564 (PRK12564)GATase (pfam00117)CPSase.sm_chain (pfam00988)→
env-538	CEUD01129050.1	+	159	207	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-539	JGI24724J26744_10024136	-	2300	2252	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→
Fic-1-1	NZ_KN525716.1	+	2656682	2656730	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→ CarA (COG0505)PRK12564 (PRK12564)→
Mze-1-1	NZ_AULQ01000008.1	-	44044	43996	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→ CarA (COG0505)PRK12564 (PRK12564)→
env-540	KGLS1_ANT01.95m_c10270403	+	123	171	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-541	DelMOSum2010_c10000497	-	33517	33469	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→ CarA (COG0505)PRK12564 (PRK12564)→
env-542	KGLS1_ANT02.95m_c10388256	-	163	115	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
Oma-1-1	NZ_JADR01000010.1	+	109053	109101	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→ hypo→ hypo→ CarA (COG0505)PRK12564 (PRK12564)→
env-543	wf3_Contig160	-	193	152	RNA→
env-544	KGLS1_ANT01.95m_c10151354	-	449	408	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-545	SA_S1_NOR05_45m_c10248728	-	299	258	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-546	SA_S1_NOR08_45m_c10038794	+	22	63	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-547	SA_S1_NOR08_45m_c10391914	+	152	193	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-548	JGI24724J26744_10233624	-	582	534	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-549	ElkS_mat_CD2A_1000229	-	2419	2378	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→ PRK12564 (PRK12564)CPSase.sm_chain (pfam00988)→
env-550	KGLS1_ANT03.95m_c1144743	-	169	121	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-551	CEOE01026498.1	+	404	445	RNA→ RpsD (COG0522)rpsD (PRK05327)→
env-552	CEQG01271447.1	-	1058	1017	RNA→ RpsD (COG0522)rpsD (PRK05327)→ rpoA (CHL00013)PRK05182 (PRK05182)→
env-553	CEVF01017472.1	-	1828	1787	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118)→
env-554	LAZR01000011.1	+	276612	276653	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→ CarA (COG0505)PRK12564 (PRK12564)→
env-555	ElkS_mat_CD6A_1038608	+	159	200	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-556	JGI24023J19991_10001527	+	11806	11847	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-557	JGI24023J19991_10073144	-	242	201	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-558	JGI24023J19991_10182654	-	76	35	RNA→
env-559	JGI24723J26617_10000010	-	143173	143132	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118)→ RplQ (COG0203)rplQ (PRK05591)→
env-560	JGI24723J26617_10310440	+	372	403	RNA→
env-561	SRS013705_Baylor_scaffold_46745	-	1715	1674	RNA→ RpsD (COG0522)rpsD (PRK05327)→ RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118)→
env-562	SRS014691_C2644950	-	228	187	RNA→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→

Mth-1-1	NZ_LDAS01000001.1	-	2178073	2178032	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
Ead-1-1	NZ_KB907546.1	+	154121	154162	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) →
Cal-1-1	NC_014934.1	-	701743	701702	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Zga-1-1	NC_015844.1	+	2988024	2988065	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
Mfo-1-1	NZ_JQLH01000001.1	+	1025162	1025203	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-563	CEWJ01225499.1	-	661	620	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-564	JGI11876J14442.10085363	-	384	343	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-565	JGI11876J14442.11014628	-	113	72	RNA →
env-566	JGI24023J19991.10047227	-	1363	1322	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-567	JGI24023J19991.10138758	-	690	649	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-568	JGI24723J26617.10014588	+	1099	1140	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-569	JGI24723J26617.10602636	-	242	201	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-570	Subgingival_plaque.LANL_scaffold_16751	-	129	88	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-571	ATED_F4WRAXD01DYY4F	+	189	230	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Mru-1-1	NC_015945.1	-	713998	713957	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
Cly-1-1	NC_015167.1	+	2435971	2436012	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Zul-1-1	NZ_JQMD01000002.1	+	4824073	4824114	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-572	KGL_S1_ANT01.95m.c10057626	-	442	394	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-573	KGL_S1_ANT01.95m.c10621365	+	226	264	RNA →
env-574	SA_S2_NOR13.50m.c1011088	-	1383	1335	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-575	SA_S1_NOR05.45m.c10208693	+	159	207	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-576	SA_S1_NOR05.45m.c10289234	+	223	271	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-577	KGL_S2_ANT04.2345m.c1009836	+	891	939	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_polA_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-578	SA_S2_NOR15.50m.c10285015	+	159	207	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-579	KGL_S1_ANT03.95m.c1055981	-	201	153	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-580	JGI24024J18818.10780925	+	148	196	RNA →
env-581	CEUX01091020.1	+	141	189	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-582	KVRMV2.101047941	+	60	108	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Gsa-1-1	NZ_KE384430.1	+	1061256	1061304	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
Fba-4-1	NZ_ALIH01000001.1	+	391313	391361	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → hypo → hypo → CarA (COG0505)PRK12564 (PRK12564) →
Ssp-2-1	NZ_JHZX01000001.1	-	1257672	1257624	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-583	KGL_S1_ANT01.95m.c10261611	-	344	296	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →

env-584	SA_S1_NOR05_45m.c10000531	+	10203	10251	RNA → ←-hypo
env-585	SA_S1_NOR08_45m.c10128342	-	449	401	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-586	KGI_S2_ANT04_2345m.c1022193	+	1360	1408	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-587	KGI_S1_ANT02_95m.c10022183	+	483	531	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-588	CEQS01129325.1	-	418	370	RNA → S4 (smart00363)RpsD (COG0522) →
env-589	LGVF01581283.1	-	913	865	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) →
Lsp-1-1	NZ_JYNQ01000001.1	-	1525387	1525339	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Sze-1-1	NZ_CP007202.1	-	225594	225546	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
Osp-2-1	NZ_JADT01000008.1	+	109566	109614	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-590	SA_S1_NOR08_45m.c10544044	+	126	174	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-591	KGI_S1_ANT02_95m.c10037840	-	206	165	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-592	CESF01075296.1	+	14667	14715	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → hypo → hypo → CarA (COG0505)PRK12564 (PRK12564) →
env-593	ACQI01007085.1	-	679	639	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-594	TDF_OR_ARG05_123m.c1016145	-	527	486	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-595	TDF_OR_ARG04_113m.c1149045	-	173	132	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-596	SA_S1_NOR05_45m.c10029529	+	805	846	RNA → RpsD (COG0522)rpsD (PRK05327) → hypo →
env-597	SA_S1_NOR08_45m.c10216906	-	145	104	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-598	KGI_S2_ANT04_2345m.c1307712	-	223	182	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-599	KGI_S1_ANT02_95m.c10521979	+	127	168	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-600	BS_KBA_SWE12_21m.c10766585	-	160	112	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-601	CENV01048908.1	+	2405	2446	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) →
env-602	CEOE01058112.1	-	502	461	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-603	CERQ01210477.1	-	335	294	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-604	JGI12210J13797_10891149	+	219	250	RNA →
Psp-3-1	NC_020830.1	+	2776178	2776219	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-605	SA_S1_NOR05_45m.c10021376	-	1404	1356	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-606	JCVI_SCAF_1101668093316	-	1811	1770	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol.L (pfam01193) → RpoA (COG0202)PRK05182 (PRK05182) →
env-607	JGI20152J14361_10000058	+	48115	48163	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-608	_GVICOHK01D9LRN	+	86	126	RNA →
env-609	LWAEaNiAF_GBUVFP102I049T	-	173	131	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-610	JGI25909J50240_1174521	+	96	138	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-611	M3P_c10616965	+	93	134	RNA →
env-612	3300000052_007306	+	713	755	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol.A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Fgi-1-1	NZ_JNCP01000052.1	+	79268	79310	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol.A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-613	JGI12272J11983_1656627	-	104	62	RNA → ←-hypo
env-614	KGI_S2_ANT04_2345m.c1000254	-	19083	19041	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol.A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-615	JGI25908J49247_10003866	+	1771	1813	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → S4 (smart00363)RpsD (COG0522) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol.A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-616	JGI12421J11937_10089621	-	766	724	RNA → RpsD (COG0522)rpsD (PRK05327) → hypo →

env-617	JGI25912J50252_10007817	-	2296	2254	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
Fps-1-1	NZ_JRWC01000005.1	-	680844	680802	RNA → RpsD (COG0522)rpsD (PRK05327) → hypo → RplQ (COG0203)rplQ (PRK05591) →
env-618	ARMCC_Contig_363473	+	473	515	RNA →
env-619	JGI20153J14295_10238628	+	268	310	RNA → ← hypo
env-620	JGI25907J50239_1282084	+	32	74	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Ffr-1-1	NZ_AUDO01000001.1	-	396813	396771	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-621	KGLS1_ANT01_95m_c10061422	+	544	586	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-622	JGI24770J26754_10196236	+	572	614	RNA →
env-623	JGI25909J50240_1035901	-	911	869	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → S4 (smart00363)RpsD (COG0522) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-624	JGI25911J50253_10049044	+	118	160	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-625	3300000052_115516	-	282	240	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Ffr-2-1	NZ_AHKF01000008.1	-	69789	69747	RNA → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-626	KGLS1_ANT01_95m_c10048862	+	770	812	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-627	JGI24770J26754_10143512	-	394	352	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-628	MRS1b_contig_1810326	-	411	369	RNA → S4 (smart00363)RpsD (COG0522) →
Fsp-2-1	NZ_AJXL01000028.1	-	8777	8735	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-629	3300001605_10110064	+	1045	1087	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-630	JGI25910J50241_10439814	-	102	60	RNA →
env-631	MRS2a_Contig_10143	+	194	236	RNA → RpsD (COG0522)rpsD (PRK05327) → rpoA (CHL00013)PRK05182 (PRK05182) →
Fch-1-1	NZ_JASY01000008.1	-	165622	165580	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-632	M3P_c10026069	+	470	512	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-633	Y607_1006252	+	157633	157675	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-634	AglaG_GDN60OX02GVF13	+	112	154	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Fsp-6-1	NZ_JXQR01000040.1	+	224224	224266	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-635	SA_S1_NOR08_45m_c10825333	-	194	152	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-636	PBR_1001305	-	1487	1445	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-637	JGI25908J49247_10195454	-	436	394	RNA → S4 (smart00363)RpsD (COG0522) →
env-638	JGI25914J50564_10084240	-	445	403	RNA → RpsD (COG0522)rpsD (PRK05327) →
Fte-1-1	NZ_KE384384.1	-	340469	340427	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-639	3300000053_265566	-	115	73	RNA →
env-640	3300000558_10106130	+	1517	1559	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-641	JGI25912J50252_10474158	+	162	204	RNA →
env-642	LM15JUN2010E_c5792	-	283	241	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-643	BS_KBA_SWE12_21m_c10390926	-	240	198	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-644	KGLS1_ANT01_95m_c10748070	-	50	18	RNA →
env-645	BS_KBA_SWE21_205m_10011318	+	306	348	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →

env-646	BS_KBA_SWE02.21m.10026740	+	218	260	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-647	BS_KBA_SWE12.21m.c10002755	-	5914	5872	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → hypo → CarA (COG0505)PRK12564 (PRK12564) →
env-648	TB_FS06_10DRAFT_1022891	-	1909	1861	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-649	TB_FS08_3DRAFT_1007294	+	1041	1089	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-650	TB_FS06_10DRAFT_1003825	-	2918	2870	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-651	TB_PC08_3_1003356	+	8254	8302	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-652	BS_KBA_SWE12.21m.c10074507	-	439	397	RNA → RpsD (COG0522)rpsD (PRK05327) →
Fda-1-1	NZ_AUDK01000020.1	-	17618	17576	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-653	TB_FS08_3DRAFT_1037856	-	82	40	RNA →
env-654	JGI24770J26754_10248674	-	226	184	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-655	JGI24770J26754_10101330	-	620	578	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-656	JGI25908J49247_10434406	-	89	47	RNA →
env-657	M3P_c10614138	+	93	134	RNA →
Fsp-1-1	NZ_LEKS01000003.1	-	349739	349697	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Fhy-1-1	NZ_JPRM01000006.1	-	152624	152582	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-658	TB_PC08_66_10110603	+	272	314	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-659	TB_GS09_5_10159295	+	73	115	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-660	PBR_1151212	-	8605	8563	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
Fsu-1-1	NZ_JATV01000008.1	+	149522	149564	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Fre-1-1	NZ_JPRL01000001.1	-	1417992	1417950	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-661	TB_FS08_3DRAFT_1132580	-	307	265	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-662	JGI24770J26754_10259849	+	431	473	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-663	JGI24770J26754_10222341	-	478	436	RNA → RpsD (COG0522)rpsD (PRK05327) →
Fsp-4-1	NZ_JSJO01000007.1	-	99004	98962	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-664	LM20APR2010E.c11148	+	62	104	RNA → RpsD (COG0522)rpsD (PRK05327) →
Fsp-5-1	NZ_JARP01000003.1	+	95196	95238	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Fsp-3-1	NZ_JQJY01000005.1	-	476639	476597	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-665	TB_PC08_66_10000572	+	14643	14685	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → hypo → CarA (COG0505)PRK12564 (PRK12564) →

env-666	JGI12421J11937_10000073	+	8864	8906	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-667	TB_GS09_5_10001765	+	16237	16284	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-668	2236876009_117224	-	159	111	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-669	JGI20151J14362_10046846	-	1758	1710	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-670	JGI20160J14292_10098055	-	386	338	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-671	KGL_S1_ANT01_95m.c10216591	+	168	209	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Acc-1-1	NZ_AUCB01000005.1	-	135671	135630	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-672	CENR01072972.1	+	678	719	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → PRK12564 (PRK12564)GATase (pfam00117)CPSase.sm.chain (pfam00988) →
Ala-1-1	NZ_AUKX01000021.1	+	84226	84267	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-673	JGI24025J20009_10444090	+	195	232	RNA →
env-674	JGI24724J26744_10000005	+	153007	153048	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-675	NCBI_READ_1112308291129	+	600	641	RNA →
env-676	SA_S1_NOR05_45m.c10047360	-	956	915	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-677	SRS011255_Baylor_scaffold_31377	-	4549	4508	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-678	SRS014578_C2475820	+	446	487	RNA →
env-679	SRS023841_Baylor_scaffold_6234	-	80	39	RNA →
env-680	SRS011126_Baylor_scaffold_35350	+	407	448	RNA →
env-681	SRS023841_Baylor_scaffold_1278	+	2872	2913	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-682	KGI_S2_ANT04_2345m.c1182776	+	183	224	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-683	SRS015064_WUGC_scaffold_6319	-	214	173	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-684	SRS015899_WUGC_scaffold_15247	+	600	641	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-685	SRS043755_WUGC_scaffold_16606	-	81	40	RNA →
env-686	SRS053917_LANL_scaffold_21451	-	613	572	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-687	NCBI_READ_1112493645660	-	765	724	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-688	JGI11881J13070_1024505	-	310	258	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-689	NCBI_READ_1112493894880	-	314	273	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-690	2236876002_134331	+	288	329	RNA →
env-691	KGL_S1_ANT01_95m.c10003318	+	5674	5715	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-692	TDF_OR_ARG04_113m.c1009262	+	1093	1134	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-693	BS_KBA_SWE12_21m.c10441963	-	48	17	RNA →
env-694	SA_S1_NOR05_45m.c10029776	+	910	951	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-695	SI60aug11_100m.c1001696	+	199	240	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-696	BS_KBA_SWE02_21m.10007670	-	3008	2967	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-697	CESL01223066.1	-	581	540	RNA → RpsD (COG0522)rpsD (PRK05327) →

env-698	TFO_HY__Contig_1415	+	14727	14768	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-699	3300001605_10731583	+	414	455	RNA →
env-700	KVWG.1.1.1_newblercontig19647	+	110	151	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-701	JCVL_SCAF_1101668559196	-	977	935	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-702	NCBI_READ_1112494091561	+	60	101	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-703	NCBI_READ_1112532275014	-	690	649	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-704	NCBI_READ_1112777438177	-	394	353	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-705	DelMOSum2011_c10076159	+	881	922	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-706	TDF_OR_ARG04_113m.c1015903	-	887	846	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-707	BS_KBA_SWE12_21m.c10362886	+	6	47	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-708	SA_S1_NOR05_45m.c10001294	-	776	735	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182) →
env-709	KGI_S1_ANT03_95m.c1044459	-	439	398	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-710	JGI20154J14316_10006580	+	6557	6598	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-711	CESI01170757.1	+	255	296	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-712	3300001592_11040489	+	52	93	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-713	JGI25321J39296_1043397	+	52	93	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
Pir-1-1	NZ_CH724148.1	-	107482	107441	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-714	NCBI_READ_1112494062227	-	199	158	RNA →
env-715	NCBI_READ_1112493702487	-	839	798	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-716	NCBI_READ_1112290461315	+	55	96	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-717	DelMOSum2010_c10003497	+	7046	7087	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-718	SA_S2_NOR13_50m.c1014240	-	48	17	RNA →
env-719	BS_KBA_SWE12_21m.c10004498	-	3174	3133	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-720	BS_KBA_SWE12_21m.c10128822	-	291	250	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-721	SA_S1_NOR08_45m.c10718266	+	33	74	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-722	JGI20154J14316_10014338	-	4356	4315	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-723	BS_KBA_SWE02_21m_10461828	+	81	122	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-724	CESU01046469.1	+	91	132	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-725	3300001580_10549671	+	137	178	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-726	JGI24724J26744_10022788	-	166	125	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Jma-1-1	NZ_JH651379.1	-	2626446	2626405	RNA → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → eno (PRK00077)enolase (cd03313) →
env-727	NCBI_READ_1112493915188	-	912	874	RNA → hypo →
env-728	NCBI_READ_1112290401224	+	25	66	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-729	NCBI_READ_1112493792322	+	649	690	RNA →
env-730	AMQJ01014928.1	+	561	602	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-731	SA_S2_NOR13_50m.c1000098	+	13594	13635	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-732	BS_KBA_SWE12_21m.c10395815	-	39	8	RNA →
env-733	BS_KBA_SWE12_21m.c10510804	+	111	152	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-734	SA_S2_NOR15_50m.c10003768	-	582	541	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-735	SI34jun09_10m_1017310	+	995	1036	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-736	CEQS01147054.1	-	337	296	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →

env-737	3300000558_10037104	-	1932	1891	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-738	JGI24025J20009_10008494	+	2996	3037	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CPSase_sm_chain (smart01097)CPSase_sm_chain (pfam00988) →
env-739	JGI25321J50212_10028228	+	778	819	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-740	NCBI_READ_1112493671175	-	717	758	RNA →
env-741	NCBI_READ_1112493447629	-	601	560	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-742	SA_S1_NOR08_45m_c10473502	+	160	200	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-743	SA_S2_NOR15_50m_c10652927	-	82	42	RNA →
env-744	SA_S1_NOR05_45m_c10011813	+	2157	2197	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-745	TB_PC08_66_10003287	-	3261	3221	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-746	LGVC01026408.1	-	246	206	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-747	LGVF01085840.1	+	3439	3479	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-748	JGI24023J19991_10058338	+	371	411	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
Cca-2-1	NZ_CDO101000154.1	+	49748	49788	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-749	TDF_OR_ARG04_113m_c1311978	+	76	116	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-750	SA_S1_NOR08_45m_c10021922	-	775	735	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182) →
env-751	SA_S2_NOR15_50m_c10674918	+	250	284	RNA →
env-752	JGI24024J18818_10005433	-	2993	2953	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-753	LGVD01055874.1	+	4328	4368	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-754	JGI26437J51864_10085571	+	322	362	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-755	BS_KBA_SWE12_21m_c10012235	-	428	388	RNA → S4 (smart00363)RpsD (COG0522) →
env-756	BS_KBA_SWE12_21m_c10357750	+	138	178	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-757	SA_S1_NOR08_45m_c10216310	+	259	299	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-758	TDF_MC_ARG02_113m_c1073765	+	140	180	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-759	KGLS1_ANT01_95m_c10034647	+	846	886	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-760	JGI24024J18818_10127678	-	133	93	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-761	LGVD01081681.1	-	710	670	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → RpsD (COG0522)rpsD (PRK05327) →
env-762	JGI24023J19991_10002979	-	2498	2458	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Ccy-1-1	NZ_CDOF01000060.1	-	6612	6572	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Cca-1-1	NZ_CDOE01000064.1	+	15288	15328	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → Methyltransf_23 (pfam13489) →
env-763	TDF_MC_ARG01_113m_c1021061	+	112	152	RNA → S4 (smart00363)RpsD (COG0522) →
env-764	SA_S2_NOR15_50m_c10115366	-	840	800	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-765	SA_S2_NOR13_50m_c1004409	+	1238	1278	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-766	JGI24024J18818_10558133	-	216	176	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-767	LGVF01258235.1	+	471	511	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-768	TDF_MC_ARG01_113m_c1001894	-	1149	1109	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
Pja-1-1	NZ_JSWG01000012.1	-	78120	78072	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →

env-769	BS_KBA_SWE12.21m.c10006531	+	2159	2207	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-770	BS_KBA_SWE02.21m.10206790	+	72	120	RNA → RpsD (COG0522)rpsD (PRK05327) →
Gme-1-1	NZ_AUHD01000007.1	+	277770	277818	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-771	BS_KBA_SWE12.21m.c10002655	-	2863	2815	RNA → RpsD (COG0522)rpsD (PRK05327) → rpoA (CHL00013)PRK05182 (PRK05182) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Pme-1-1	NZ_JXJP01000002.1	+	289435	289483	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-772	TDF_OR_ARG04.113m.c1048254	+	325	373	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-773	SA_S1_NOR08.45m.c10228226	+	189	237	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-774	3300001592.10000538	-	31145	31097	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-775	BS_KBA_SWE21.205m.10078219	+	596	644	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-776	KGI_S1_ANT02.95m.c10197724	+	147	195	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-777	JGI24723J26617.10003269	+	213	261	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) →
env-778	JGI24724J26744.10230191	-	344	296	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-779	KGI_S2_ANT04.2345m.c1317179	-	230	182	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-780	JCVL_SCAF_1096628386002	-	1571	1525	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-781	LPaug08P2610m.c1098718	+	109	157	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-782	DelMOSum2010.c10000647	-	14055	14007	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → gltA (PRK05614)EcCS_like (cd06114) →
env-783	KGI_S1_ANT01.95m.c10031960	+	223	266	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-784	2236876010.0182615	-	474	428	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → S4 (smart00363)RpsD (COG0522) →
env-785	JCVL_SCAF_1096626851900	+	1510	1551	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-786	JGI20156J14371.10002853	-	815	774	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-787	JCVL_SCAF_1096627961966	+	1328	1370	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-788	JCVL_READ_1103242618048	-	562	520	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-789	CEWO01110425.1	+	727	768	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-790	CESJ01017871.1	+	773	804	RNA →
env-791	CESU01012824.1	+	1083	1124	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-792	CESE01007018.1	-	3023	2982	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CPSase_sm_chain (smart01097)CPSase_sm_chain (pfam00988) →
env-793	CESF01014444.1	+	686	717	RNA →
env-794	LPjun09P1210m.c1061424	-	156	115	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-795	SI34jun09.10m.1065651	+	164	205	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-796	DelMOSum2010.c10031049	+	744	785	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-797	JGI20152J14361.10004992	+	6162	6203	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-798	JCVL_SCAF_1096626908974	-	951	910	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-799	2236876010.0124125	+	466	497	RNA →
env-800	JCVL_SCAF_1096627300879	-	885	844	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-801	DelMOWin2010.c10056093	-	56	21	RNA →
env-802	DelMOSum2010.c10171752	+	62	103	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-803	DelMOSum2011.c10049863	-	1275	1234	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-804	SI47jul10.100m.c1000543	-	1464	1423	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-805	SI36aug09.120m.1267228	+	135	176	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-806	JGI20156J14371.10141859	+	313	354	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-807	CENT01045813.1	-	316	275	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-808	CESI01020841.1	+	455	496	RNA → RpsD (COG0522)rpsD (PRK05327) →

env-809	CERW01035365.1	+	573	614	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-810	CESE01023512.1	-	2167	2126	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-811	CESI01115170.1	+	394	435	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-812	CESM01447978.1	-	644	603	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-813	CESI01285347.1	-	647	606	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-814	CESJ01035100.1	+	13520	13561	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)Enolase_N (pfam03952) →
env-815	CESI01140995.1	-	648	607	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-816	CESL01085606.1	+	7356	7397	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-817	CETY01336660.1	-	667	626	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-818	CERW01115847.1	-	343	302	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-819	JCVL_SCAF_1096627085079	+	1100	1141	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-820	2236876007_0120103	-	371	330	RNA → hypo →
env-821	DelMOWin2010_c10054074	+	28	69	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →
env-822	2236876010_0562604	-	92	51	RNA → ←hypo
env-823	DelMOSum2010_c10187590	-	554	513	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-824	CEOP01438579.1	+	571	612	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-825	CESI01092574.1	-	661	620	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-826	JCVL_SCAF_1096628391443	+	527	568	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) → PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
env-827	CEOK01218656.1	+	103	144	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-828	CETE01044921.1	-	657	616	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-829	CEUF01269544.1	+	331	372	RNA → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-830	CENO01020607.1	-	670	629	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-831	CEVH01290424.1	-	399	358	RNA → S4 (smart00363)RpsD (COG0522) →
env-832	CEWG01002875.1	+	131	172	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-833	CEPJ01070513.1	+	64	105	RNA → RpsD (COG0522)rpsD (PRK05327) →
env-834	2236876001_043944	-	301	260	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-835	SA_S2_NOR13_50m_c1052491	-	136	87	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-836	LPaug09P1610m_c1023406	+	657	699	RNA →
env-837	CENJ01019829.1	-	355	313	RNA → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-838	CESW01149347.1	-	2171	2129	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-839	JCVL_SCAF_1096627389932	+	1334	1376	RNA → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → CarA (COG0505)PRK12564 (PRK12564) → eno (PRK00077)enolase (cd03313) → gltA (PRK05614)EcCS_like (cd06114) → DdaH (COG1834)arcA (TIGR01078) → Amidinotransf (pfam02274) →
env-840	P_1C_Liq_3_UnCty_1071622	+	198	240	RNA →
env-841	P_2C_Liq_1_UnCty_1012564	+	496	538	RNA → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) →

15.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 15.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one S4-

Flavobacteria RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 15.2.

- cd00599** (2) Endo-N-acetylmuramidases (muramidases) are lysozymes (also referred to as peptidoglycan hydrolases) that degrade bacterial cell walls by catalyzing the hydrolysis of 1,4-beta-linkages between N-acetylmuramic acid and N-acetyl-D-glucosamine residues.
- cd01744** (5) Small chain of the glutamine-dependent form of carbamoyl phosphate synthase, CPSase II.
- cd03313** (29) Enolase: Enolases are homodimeric enzymes that catalyse the reversible dehydration of 2-phospho-D-glycerate to phosphoenolpyruvate as part of the glycolytic and gluconeogenesis pathways.
- cd06114** (8) Escherichia coli (Ec) citrate synthase (CS) GltA-like.
- cd06928** (183) N-terminal domain of the Alpha subunit of Bacterial RNA polymerase.
- cd11313** (1) Alpha amylase catalytic domain found in archaeal and bacterial Alpha-amylases (also called 1,4-alpha-D-glucan-4-glucanohydrolase).
- CHL00013** (7) RNA polymerase alpha subunit
- CHL00113** (1) ribosomal protein S4; Reviewed
- COG0202** (115) DNA-directed RNA polymerase, alpha subunit/40 kD subunit [Transcription]
- COG0203** (224) Ribosomal protein L17 [Translation, ribosomal structure and biogenesis]
- COG0505** (80) Carbamoylphosphate synthase small subunit [Amino acid transport and metabolism, Nucleotide transport and metabolism]
- COG0522** (578) Ribosomal protein S4 or related protein [Translation, ribosomal structure and biogenesis]
- COG1834** (2) N-Dimethylarginine dimethylaminohydrolase [Amino acid transport and metabolism]
- pfam00117** (3) Glutamine amidotransferase class-I.
- pfam00163** (226) Ribosomal protein S4/S9 N-terminal domain.
- pfam00285** (1) Citrate synthase, C-terminal domain.
- pfam00988** (15) Carbamoyl-phosphate synthase small chain, CPSase domain.
- pfam01193** (34) RNA polymerase Rpb3/Rpb11 dimerisation domain.
- pfam01196** (9) Ribosomal protein L17.
- pfam02274** (2) Amidotransferase.
- pfam03118** (157) Bacterial RNA polymerase, alpha chain C terminal domain.
- pfam03485** (1) Arginyl tRNA synthetase N terminal domain.
- pfam03486** (2) HI0933-like protein.
- pfam03952** (2) Enolase, N-terminal domain.
- pfam03971** (2) Monomeric isocitrate dehydrogenase.
- pfam10310** (2) Maintenance of telomere capping protein 1.
- pfam13489** (1) Methyltransferase domain.
- PLN02967** (1) kinase
- PRK00077** (31) enolase; Provisional
- PRK05182** (345) DNA-directed RNA polymerase subunit alpha; Provisional
- PRK05327** (783) 30S ribosomal protein S4; Validated
- PRK05591** (233) 50S ribosomal protein L17; Validated
- PRK05614** (9) type II citrate synthase; Reviewed
- PRK10811** (1) ribonuclease E; Reviewed
- PRK12564** (90) carbamoyl phosphate synthase small subunit; Reviewed
- PRK14521** (2) 30S ribosomal protein S16; Provisional
- smart00363** (26) S4 RNA-binding domain.
- smart00621** (2) Glycosyl hydrolases family 25.
- smart01016** (1) Arginyl tRNA synthetase N terminal dom.
- smart01097** (6) Carbamoyl-phosphate synthase small chain, CPSase domain.
- TIGR00178** (2) isocitrate dehydrogenase, NADP-dependent, monomeric type. [Energy metabolism, TCA cycle]
- TIGR00275** (2) flavoprotein, HI0933 family. [Unknown function, Enzymes of unknown specificity]
- TIGR01078** (1) arginine deiminase. [Energy metabolism, Amino acids and amines]
- TIGR02456** (1) trehalose synthase. [Energy metabolism, Biosynthesis and degradation of polysaccharides]

15.4 Multiple-sequence alignment

Each S4-Flavobacteria RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 15.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The S4-Flavobacteria RNA itself is denoted by the line underneath marked 5’ and 3’ on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in **gray letters**. Stems of predicted rho-independent transcription terminators, if any, are shaded **yellow**. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in **green**. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded **green**. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-Crick or G-U

pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, **red nucleotides**: nucleotide identity conserved more than 97% of the time, **black nucleotides**: 90%, **gray nucleotides**: 75%, **red circle** (◉): nucleotide is present 97% of the time, **black circle** (◐): 90%, **gray circle** (◑): 75%, **white circle** (◒): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Csp-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Coproccoccus sp.</i>	HPP0074
Dfo-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Dorea formicigenerans</i>	4_6_53AFAA
Dfo-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Dorea formicigenerans</i>	ATCC 27755
Dlo-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Dorea longicatena</i>	AGR2136
Dlo-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Dorea longicatena</i>	DSM 13814
Dsp-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Dorea sp.</i>	5-2
Dsp-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Dorea sp.</i>	AGR2135
Dsp-3-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Dorea sp.</i>	D27
Lba-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	bacterium	1_1_57FAA
Lba-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	bacterium	2_1_46FAA
Lba-3-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	bacterium	2_1_58FAA
Lba-4-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	bacterium	3-2
Lba-5-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	bacterium	3_1_46FAA
Lba-6-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	bacterium	4_1_37FAA
Lba-7-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	bacterium	5_1_57FAA
Lba-8-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	bacterium	6_1_63FAA
Lba-9-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	bacterium	8_1_57FAA
Lba-10-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	bacterium	9_1_43BFAA
Lba-11-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	bacterium	FE2018
Rpe-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Robinsoniella peoriensis</i>	
Rsp-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Robinsoniella sp.</i>	KNHs210
Dma-1-1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	<i>Drancourtella massiliensis</i>	
Rga-1-1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	<i>Ruminococcus gawvreauii</i>	DSM 19829
Rgn-3-1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	<i>Ruminococcus gnavus</i>	ATCC 29149
Rob-1-1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	<i>Ruminococcus obeum</i>	ATCC 29174
Rsp-2-1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	<i>Ruminococcus sp.</i>	5_1_39BFAA
Rsp-3-1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	<i>Ruminococcus sp.</i>	JC304
Rto-1-1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	<i>Ruminococcus torques</i>	ATCC 27756
env-1 to env-438	environmental samples		

16.2 Gene contexts

Each S4-Clostridia RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one S4-Clostridia RNA are assigned a color; other domains are gray. Information about these conserved domains is given

in Section 16.3. The accession of the sequence containing each S4-Clostridia RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5’ and 3’ boundaries of each S4-Clostridia RNA. If the 5’ coordinate is greater than the 3’ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 16.1.

abbrev.	Seq. accession	5’ at	3’ at	genes	
env-1	AUXO015936627.1	+	257	309	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-2	SRS016095_C2391063	+	242	301	RNA→ rps13 (CHL00137)rpsM (PRK05179)uS13_bact (TIGR03631)→
env-3	SRS052697_LANL_scaffold_5093	+	388	447	RNA→ rps13 (CHL00137)RpsM (COG0099)rpsM (PRK05179)uS13_bact (TIGR03631)→
env-4	scaffold46699_2_MH0044	+	217	276	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-5	scaffold83773_1_MH0059	-	378	319	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-6	NLF007_scaffold4057_7	+	767	826	RNA→ rps13 (CHL00137)rpsM (PRK05179)uS13_bact (TIGR03631)→
env-7	scaffold201303_1_MH0006	-	337	278	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-8	scaffold3229_1_MH0038	-	339	280	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-9	UnmappedStool.Broad_scaffold_1083211	+	240	299	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-10	NOM007_scaffold46220_1	+	19654	19713	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→

env-11	SRS014923_C3228657	+	242	301	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-12	NLF009_scaffold14126_1	-	1235	1176	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-13	NOF014_scaffold21218_11	+	6928	6987	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-14	SRS014459_C2557888	+	432	491	RNA → rps13 (CHL00137)rpsM (PRK05179)uS13_bact (TIGR03631) →
env-15	SRS017191_C1739427	+	3572	3631	RNA → rps13 (CHL00137)rpsM (PRK05179)uS13_bact (TIGR03631) →
env-16	SRS015065_WUGC_scaffold_29501	-	380	321	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-17	08_07_GOS_DNA_scaffold2232_4	-	501	447	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-18	O8_19_POLYDEXT_DNA_scaffold1532_15	+	208	262	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-19	JGI994J12354_10009703	-	3666	3612	RNA → RpsM (COG0099)rpsM (PRK05179) →
Bsp-6-1	NZ_KL370881.1	+	27319	27373	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-20	JGI20225J20221_1018968	-	1486	1434	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-21	AUX0017144234.1	+	5176	5235	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-22	AUX0010388311.1	+	129	199	RNA → ←-hypo
env-23	AUX0013310740.1	-	8305	8254	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-24	2227071526	-	270	181	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-25	2227624636	+	10763	10852	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-26	JGI996J12353_1001490	-	756	667	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-27	JGI994J12354_10000212	+	33654	33743	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)RibosomalL17 (pfam01196) →
env-28	IMNBL1_c0003830	+	98	187	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)RibosomalL17 (pfam01196) →
env-29	2226950468	-	265	181	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-30	2227073852	-	2087	2000	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-31	2227078579	+	1162	1249	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-32	IMNBL1_c0000921	-	22643	22556	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-33	2227013722	+	78	165	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-34	UnmappedStool_Broad_scaffold_1059721	+	666	716	RNA →
env-35	SRS014459_WUGC_scaffold_78018	-	406	356	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-36	SRS015065_C2231612	-	187	137	RNA → hypo →
env-37	AUX0016905584.1	+	229	278	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-38	scaffold82255_1_V1.UC-14	+	430	480	RNA →
env-39	SRS014459_WUGC_scaffold_74344	+	465	518	RNA →
env-40	SRS015065_C2236339	-	162	109	RNA → hypo →
env-41	SRS056259_LANL_scaffold_44254	-	151	97	RNA → ←-hypo
env-42	HCF12C_401724	+	232	297	RNA → hypo → RpsM (COG0099)rpsM (PRK05179) →
env-43	longitudinal_220_106	+	5954	6044	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-44	longitudinal_221_153	+	3442	3532	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-45	AJWZ01010485.1	+	81	143	RNA → hypo →
env-46	AUX0010018345.1	+	2698	2750	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-47	AUX0016373287.1	-	737	678	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-48	AUX0016002689.1	-	1204	1155	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-49	JGI2065J20421_1001636	+	4338	4413	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)RibosomalL17 (pfam01196) →

env-50	UnmappedStool_Broad_C250603932	+	179	253	RNA →
Dma-1-1	NZ_CVPG01000005.1	+	471925	471999	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
Cba-2-1	NZ_BAIB02000003.1	+	231885	231959	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-51	2227358603	-	1575	1505	RNA → RpsM (COG0099)rpsM (PRK05179) →
Lba-2-1	NZ_KE150017.1	-	1725164	1725115	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
[ce-1-1	NZ_JHXY01000007.1	-	130151	130097	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
Ece-1-1	NZ_CM001487.1	+	2588850	2588903	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) →
env-52	longitudinal_411_28	+	45651	45704	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-53	JGI20163J15578_10027836	-	917	824	RNA → hypo → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-54	scaffold18531_1.V1.CD-15	+	542	602	RNA →
env-55	4491403.3.NODE.1641	+	19531	19591	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-56	4491482.3.NODE.7819	-	589	529	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-57	longitudinal_52_17	-	410211	410151	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-58	longitudinal_231_54	-	190275	190215	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-59	DOF012.scaffold14355_2	+	135	195	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-60	longitudinal_230_114	-	42745	42685	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-61	longitudinal_232_15	-	36662	36602	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-62	scaffold82035_1.MH0014	-	119	59	RNA →
env-63	scaffold818_2.V1.CD-12	+	285	345	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-64	SRS075398_C2026444	+	301	361	RNA → ←hypo
env-65	SRS012902_C526759	+	741	801	RNA →
env-66	SRS023346_C1056305	-	107	47	RNA → hypo →
env-67	BABA01009209.1	+	367	427	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-68	scaffold33086_2.V1.CD-1	-	516	456	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-69	DLM009_scaffold11270_3	+	4628	4688	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-70	NLM017_scaffold20089_2	+	813	873	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-71	NLM027_scaffold10047_1	-	48785	48725	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-72	NLM028_scaffold839_7	-	1356	1296	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-73	NOF005_scaffold31692_1	-	1199	1139	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-74	NOM002_scaffold8624_11	-	5573	5513	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
Rgn-3-1	NZ_AAAYG02000020.1	-	118252	118192	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → PRK05309 (PRK05309)RpsK (COG0100) →
env-75	SRS012273_Baylor_scaffold_747	+	3356	3416	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-76	DLM024_scaffold1675_1	+	19438	19498	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-77	DOM026_scaffold2679_6	+	580	640	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-78	SRS023176_C906831	-	179	119	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-79	longitudinal_525_50	+	44720	44780	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
Lba-3-1	NZ_GL945339.1	-	5397	5337	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
Rgn-2-1	NZ_KI669415.1	-	296050	295990	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-80	NLM007_scaffold2834_4	+	3478	3538	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-81	SRS015578_WUGC_scaffold_47109	-	107	47	RNA →
Rgn-1-1	NZ_JAGQ01000004.1	+	1161487	1161547	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-82	SRS057717_LANL_scaffold_8560	+	38	98	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-83	4491488.3.NODE.4718	-	3548	3488	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →

env-84	NOM026_C930720.1	+	365	425	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-85	NOM027_scaffold1888.6	+	683	743	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-86	NOM028_scaffold2883.9	+	12792	12852	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-87	SRS017521_Baylor_scaffold.33616	-	298	238	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-88	longitudinal_460_95	+	247645	247697	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-89	4448814.3_Contig36431	+	203	262	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-90	JGI20163J15578_10056589	+	1720	1809	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-91	JGI20163J15578_10006853	+	4205	4343	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-92	HCF14C_2.1.1_newblercontig58175	+	339	418	RNA →
env-93	AUXO011545607.1	-	224	130	RNA → ←-hypo
env-94	AUXO017992350.1	+	172	224	RNA → RpsM (COG0099)rpsM (PRK05179) → hypo →
Lba-11-1	NZ_JNKK01000010.1	-	51200	51148	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-95	AUXO011286893.1	+	221	272	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-96	AUXO012939603.1	+	907	958	RNA →
env-97	longitudinal_461_56	+	109667	109723	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-98	longitudinal_462_123	+	109674	109730	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-99	longitudinal_463_7	+	109694	109750	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-100	longitudinal_522_3104	+	4325	4381	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
Dsp-3-1	NZ_KQ236746.1	+	368740	368792	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
Dsp-1-1	NZ_KE159794.1	-	157768	157723	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-101	SRS011134_C4860384	+	270	323	RNA →
env-102	SRS016095_C2345639	-	169	116	RNA → rps13 (CHL00137)rpsM (PRK05179) →
Dsp-2-1	NZ_ATVU01000008.1	+	63049	63102	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-103	SRS018313_C7830548	-	121	68	RNA →
env-104	SRS011271_C2920016	+	238	291	RNA →
env-105	SRS015133_C3278084	+	230	283	RNA →
env-106	longitudinal_66_246	+	13912	13965	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-107	longitudinal_67_37	+	13912	13965	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-108	longitudinal_111_61	+	12242	12295	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-109	longitudinal_112_225	+	13912	13965	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-110	longitudinal_187_175	+	41148	41201	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-111	longitudinal_295_1	-	30869	30816	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-112	longitudinal_296_203	-	16114	16061	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-113	longitudinal_297_58	-	30869	30816	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-114	longitudinal_298_248	+	4540	4593	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-115	longitudinal_421_71	+	56051	56104	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →

Dfo-2-1	NZ_AAxA02000012.1	-	126306	126253	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RpoA (COG0202)PRK05182 (PRK05182) →
Dfo-1-1	NZ_JH126494.1	-	91730	91677	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-116	SRS015217_C2148859	-	111	58	RNA → hypo →
env-117	SRS023914_C1983791	-	382	329	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-118	DLM022_scaffold5029_5	-	1050	997	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → hypo →
env-119	NOM001_scaffold35657_1	+	984	1035	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-120	SRS015217_C2114294	-	125	74	RNA → hypo →
env-121	SRS017521_Baylor_scaffold_12819	-	125	74	RNA → hypo →
env-122	SRS064276_LANL_scaffold_58360	+	453	504	RNA →
env-123	4491413.3_NODE.12466	-	145	94	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-124	4491421.3_NODE.115793	+	17730	17781	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-125	longitudinal_113_28	-	33326	33275	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-126	longitudinal_114_32	-	20351	20300	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
Dlo-2-1	NZ_DS264399.1	+	39450	39501	rplQ (PRK05591)Ribosomal_L17 (pfam01196) → RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-127	AUXO014831574.1	-	23382	23331	RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-128	SRS015782_C3128808	+	194	245	RNA →
env-129	scaffold84298_1_MH0050	-	369	318	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-130	longitudinal_299_23	-	26288	26235	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-131	longitudinal_300_84	-	26610	26557	rplQ (PRK05591)Ribosomal_L17 (pfam01196) → RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-132	longitudinal_301_116	-	26432	26379	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-133	longitudinal_302_50	+	53065	53118	rplQ (PRK05591)Ribosomal_L17 (pfam01196) → RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-134	longitudinal_346_79	+	20368	20421	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-135	longitudinal_347_101	-	54042	53989	rplQ (PRK05591)Ribosomal_L17 (pfam01196) → RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-136	SRS016095_WUGC_scaffold_24083	-	346	293	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-137	NLM027_scaffold13626_3	-	4716	4663	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-138	NOM029_scaffold5480_12	-	185	132	rplQ (PRK05591)Ribosomal_L17 (pfam01196) → RNA → rps13 (CHL00137)rpsM (PRK05179) →

env-139	longitudinal_464_28	+	52346	52399	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
Dlo-1-1	NZ_KE384171.1	-	39745	39692	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-140	DLM009_scaffold5025_5	+	13073	13126	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-141	longitudinal_134_7	+	68515	68568	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → hypo → GltD (COG0493)NuoF (COG1894)NADH_4Fe-4S (pfam10589)NAD_binding_8 (pfam13450) →
env-142	longitudinal_135_8	-	31400	31347	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → hypo → GltD (COG0493)NuoF (COG1894)NADH_4Fe-4S (pfam10589)NAD_binding_8 (pfam13450) →
env-143	longitudinal_188_28	+	68515	68568	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → hypo → GltD (COG0493)NuoF (COG1894)NADH_4Fe-4S (pfam10589)NAD_binding_8 (pfam13450) →
env-144	longitudinal_189_5	-	31403	31350	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → hypo → GltD (COG0493)NuoF (COG1894)NADH_4Fe-4S (pfam10589)NAD_binding_8 (pfam13450) →
env-145	longitudinal_190_130	+	68514	68567	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → hypo → GltD (COG0493)NuoF (COG1894)NADH_4Fe-4S (pfam10589)NAD_binding_8 (pfam13450) →
env-146	longitudinal_465_52	+	52346	52399	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-147	longitudinal_466_3	-	31944	31891	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-148	longitudinal_467_77	+	52344	52397	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-149	longitudinal_414_23	+	90211	90261	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-150	SRS017191_Baylor_scaffold_17384	-	388	337	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-151	SRS015217_WUGC_scaffold_28345	-	149	98	RNA →
Chy-1-1	NZ_GG657761.1	+	327237	327288	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-152	SRS043411_C1566362	-	324	270	RNA → hypo →
env-153	SRS016495_LANL_scaffold_8908	-	253	200	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-154	SRS016517_C20253773	-	120	67	RNA → hypo →
Esp-1-1	NZ_JPJE01000006.1	+	154152	154252	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-155	SRS023971_Baylor_scaffold_879	-	742	602	RNA → RpsM (COG0099)rpsM (PRK05179) → rps11 (CHL00041)PRK05309 (PRK05309) →

env-156	longitudinal_21_17	-	9462	9322	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-157	longitudinal_22_92	-	2112	1972	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-158	longitudinal_23_385	-	106549	106409	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-159	DLM016_scaffold59795_1	-	189	49	RNA →
env-160	SRS048870_WUGC_scaffold_43350	-	502	362	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-161	NLM032_scaffold39271_3	+	153	293	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-162	SRS016095_WUGC_scaffold_16877	-	640	500	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-163	SRS049959_C3775241	-	206	66	RNA → hypo →
env-164	scaffold9684_3_O2.UC-11	+	3170	3310	RNA →
env-165	longitudinal_441_49	+	144537	144677	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-166	SRS018351_C2776780	-	763	623	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-167	SRS011586_WUGC_scaffold_26070	-	188	48	RNA → hypo →
env-168	NOF014_scaffold14549_2	+	5949	6089	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-169	DOF008_scaffold13044_2	-	703	563	RNA → RpsM (COG0099)rpsM (PRK05179) → rps11 (CHL00041)PRK05309 (PRK05309) →
env-170	NLM028_scaffold5808_6	+	527	667	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-171	DOF009_scaffold30020_7	+	1575	1715	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → hypo →
env-172	DLM010_scaffold23309_2	+	360	500	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-173	DOM003_scaffold5836_26	+	3132	3272	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-174	NLM026_scaffold16599_9	+	5961	6101	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-175	DLM027_scaffold4257_3	-	2404	2264	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-176	SRS065504_LANL_scaffold_20275	-	380	240	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-177	NOF010_C660913_1	+	68	208	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-178	DLM022_scaffold4596_9	-	438	298	RNA → RpsM (COG0099)rpsM (PRK05179) →
Lba-4-1	NZ_KE159795.1	-	1371013	1370958	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-179	DLF012_scaffold283_24	+	205	261	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → S4 (smart00363)RpsD (COG0522) →
env-180	longitudinal_337_87	+	40213	40269	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
Csc-1-1	NZ_DS499705.1	-	60598	60542	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) →
Cba-3-1	NZ_BAII02000008.1	+	191914	191970	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
[sc-1-1	NZ_BAHS01000033.1	+	21391	21446	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → hypo → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
Lba-7-1	NZ_GL945245.1	-	61088	61032	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-181	DLF009_C396903.1	+	387	443	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-182	AUXO014627591.1	+	809	856	RNA →
env-183	AUXO010674837.1	-	397	351	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-184	4448819.3.Contig14521	+	180	277	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-185	scaffold93_3_V1.CD-12	+	256	353	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-186	SRS017521_Baylor_scaffold_37560	+	56	153	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-187	SRS024132_Baylor_scaffold_32332	+	1683	1780	RNA →
env-188	SRS042284_C1690458	-	139	42	RNA → hypo →
env-189	BABA01032099.1	+	74	171	RNA → RpsM (COG0099)rpsM (PRK05179) →

env-190	NOF005_scaffold49548_1	+	65	162	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-191	DLF006_scaffold33559_1	+	534	631	RNA → ←-hypo
env-192	DLM012_scaffold29270_1	+	539	636	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-193	DLM022_scaffold333_4	+	12625	12722	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-194	scaffold43093_1.V1.CD-15	-	398	301	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-195	SRS057478_LANL_scaffold_2364	+	6630	6727	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-196	SRS014287_WUGC_scaffold_32769	-	803	706	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-197	SRS014459_WUGC_scaffold_353	-	704	607	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-198	SRS016495_LANL_scaffold_14198	+	1644	1741	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-199	SRS064276_LANL_scaffold_67145	-	653	556	RNA → RpsM (COG0099)rpsM (PRK05179) →
Lba-5-1	NZ_GL890521.1	-	320951	320854	RNA → RpsM (COG0099)rpsM (PRK05179) →
Lba-1-1	NZ_GL945299.1	-	118724	118627	RNA → RpsM (COG0099)rpsM (PRK05179) →
Lba-9-1	NZ_GL622455.1	+	76223	76320	RNA → RpsM (COG0099)rpsM (PRK05179) →
Rto-1-1	NZ_DS264365.1	-	22031	21934	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-200	UnmappedStool_Broad_scaffold_762794	+	200	297	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-201	NLM031_scaffold9790_1	+	8440	8537	RNA → ←-hypo
env-202	SRS012273_C3528184	-	135	38	RNA → hypo →
env-203	SRS014923_C3148149	-	135	38	RNA → hypo →
env-204	SRS015217_WUGC_scaffold_6745	+	283	380	RNA →
env-205	SRS019397_WUGC_scaffold_29890	-	135	38	RNA → hypo →
env-206	SRS019601_WUGC_scaffold_3920	+	4642	4739	RNA → hypo →
env-207	SRS020869_C3206849	+	287	384	RNA →
env-208	SRS042628_C2611262	+	367	464	RNA → hypo →
env-209	SRS050422_C2650805	+	284	381	RNA →
env-210	SRS077730_LANL_scaffold_23057	-	135	38	RNA → hypo →
env-211	SRS014613_C1466654	-	148	51	RNA → hypo →
env-212	SRS015065_WUGC_scaffold_7196	+	3193	3290	RNA →
env-213	SRS015133_WUGC_scaffold_39311	-	153	56	RNA →
env-214	SRS016989_C1459026	-	153	56	RNA → hypo →
env-215	SRS064645_C414785	+	200	297	RNA →
env-216	SRS058723_C6722821	+	142	239	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-217	AUXO012083149.1	-	437	384	RNA → hypo → RpsM (COG0099)rpsM (PRK05179) →
Rpe-1-1	NZ_JTGN01000002.1	+	415740	415795	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
Rsp-1-1	NZ_JMLZ01000002.1	+	4582826	4582881	RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-218	HCF12C_72825	-	388	337	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-219	AUXO015776767.1	+	78	133	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-220	AUXO011164680.1	-	268	221	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-221	SRS050925_LANL_scaffold_36095	-	324	265	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-222	NOM009_scaffold13140_13	-	2089	2030	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-223	SRS023526_C3111217	+	472	531	RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-224	SRS023583_C1297360	-	201	142	RNA →
env-225	SRS055982_C1612735	+	1309	1368	RNA →
env-226	SRS024075_LANL_scaffold_24329	-	214	155	RNA →
env-227	SRS015578_WUGC_scaffold_35682	-	383	324	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-228	SRS016095_WUGC_scaffold_27178	-	399	340	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-229	scaffold6694_1_MH0045	-	199	140	RNA → hypo →
env-230	scaffold51326_2_MH0086	+	2401	2460	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-231	4491423.3_NODE.156416	+	1556	1615	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-232	SRS014459_WUGC_scaffold_16825	+	226	285	RNA →
env-233	SRS015065_C2405519	+	836	895	RNA →

env-234	scaffold82058.3.MH0002	+	1327	1386	RNA →
env-235	scaffold49358.1.MH0011	+	406	465	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-236	scaffold6610.2.V1.UC-6	-	583	524	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-237	UnmappedStool_Broad_scaffold_708525	+	266	325	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-238	SRS017521_C2601561	-	183	124	RNA →
env-239	SRS020869_Baylor_scaffold_12378	-	384	325	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-240	NOM013_scaffold46563_2	-	763	704	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-241	AUXO011855295.1	+	1265	1312	RNA → RpsM (COG0099)rpsM (PRK05179) → hypo →
env-242	SRS019601_C1835248	-	186	135	RNA → rpsM (PRK05179) →
env-243	DOF006_scaffold6616.2	-	320	269	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-244	SRS075398_C2013874	-	190	139	RNA → rpsM (PRK05179) →
env-245	UnmappedStool_Broad_scaffold_729622	-	165	114	RNA → hypo →
env-246	DLM024_scaffold288.2	-	17086	17035	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-247	DOM008_scaffold9546.10	-	10248	10197	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-248	NLM023_scaffold268.5	+	2617	2668	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-249	NLM027_scaffold19174.2	+	3081	3132	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-250	NOM002_scaffold15570.5	+	2668	2719	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-251	SRS057717_LANL_scaffold_2277	+	5351	5402	RNA → RpsM (COG0099)rpsM (PRK05179) →
Cne-1-1	NZ_DS995339.4	+	445348	445399	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) →
env-252	scaffold35150.1.MH0047	+	861	913	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-253	4491482.3.NODE.6411	+	1979	2031	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-254	NLM027_scaffold9.3	+	1877	1943	RNA → RpsM (COG0099)rpsM (PRK05179) →
Lba-6-1	NZ_GL872351.1	-	15002	14936	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
Csp-1-1	NZ_KE150443.1	+	296207	296273	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-255	CAM_READ_0099546121	+	82	148	RNA → RpsM (COG0099)rpsM (PRK05179) →
Lba-10-1	NZ_GL890574.1	-	15367	15301	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
Csp-2-1	NZ_KE150436.1	+	369549	369615	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-256	longitudinal_520_20	-	15080	15014	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-257	longitudinal_521_5	-	15036	14970	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-258	SRS023176_C915644	+	1011	1077	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-259	DOF006_scaffold3143.2	-	554	488	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-260	AUXO015662166.1	-	135	84	RNA → ←hypo
env-261	AUXO010716198.1	-	157	108	RNA → hypo →
env-262	UnmappedStool_Broad_scaffold_1072535	-	139	50	RNA → hypo →
env-263	longitudinal_415_5	-	192317	192267	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)RibosomalL17 (pfam01196) →
Bfo-1-1	NZ_ACCL02000023.1	-	56498	56409	RNA → hypo → hypo → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → PRK05309 (PRK05309)RpsK (COG0100) →
Bpr-1-1	NZ_JP_JF01000101.1	-	10439	10368	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)RibosomalL17 (pfam01196) →
Cba-1-1	NZ_BAHT02000178.1	-	3508	3437	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)RibosomalL17 (pfam01196) →
env-264	AUXO012679497.1	+	121	180	RNA →
env-265	AUXO010229542.1	-	194	137	RNA →
env-266	AUXO015380717.1	-	461	400	RNA → RpsM (COG0099)rpsM (PRK05179) →

env-267	scaffold5991.3_MH0071	+	105	161	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-268	scaffold2528.1.V1.UC-13	-	739	683	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-269	ADJT01013136.1	+	1342	1398	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-270	SRS054590.LANL_scaffold_5907	-	732	676	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
Rob-1-1	NZ_DS264342.1	+	2400	2456	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-271	NOM005_scaffold4156.9	-	399	343	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-272	BAAX01036074.1	+	131	187	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → hypo →
env-273	longitudinal_278_81	-	19214	19157	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-274	longitudinal_409_317	-	113247	113190	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-275	NLM027_scaffold38083.1	-	974	918	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-276	AJWZ01005537.1	+	83	139	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-277	scaffold14428.2.V1.CD-12	-	284	228	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-278	scaffold2111.3.O2.UC-18	+	4475	4531	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → S4 (smart00363)RpsD (COG0522) →
env-279	4448820.3.Contig_54992	-	235	179	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-280	SRS018351.C2808969	+	3733	3789	RNA →
env-281	longitudinal_309_72	+	12520	12576	RNA → hypo → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-282	longitudinal_205_113	+	60575	60631	RNA → hypo → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
Bsp-1-1	NZ_KE993318.1	+	57041	57097	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → hypo →
env-283	NOM009_scaffold24969_6	+	1081	1137	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-284	DOF008_scaffold7612.1	+	695	751	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-285	NLM027_scaffold2056_4	+	1652	1708	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-286	NOM005_scaffold35543.1	-	16967	16911	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-287	SRS043411.C1591614	+	354	410	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-288	ADJT01013276.1	-	15776	15720	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-289	DLM012_scaffold20960.1	+	3763	3819	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-290	NOM002.C380510.1	-	222	166	RNA → hypo →
env-291	NOM027_scaffold11759.1	+	1905	1961	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-292	NLM007_scaffold12767_10	+	9772	9828	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-293	SRS018351.C2796305	+	1883	1939	RNA →
env-294	SRS050752.C2652917	-	205	149	RNA → hypo →
env-295	SRS017521.Baylor_scaffold_5298	-	324	268	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-296	DLF012_scaffold19007.1	-	35604	35548	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-297	NLM028_scaffold1532.6	-	9451	9395	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-298	DOM018_scaffold5452.9	-	1253	1197	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-299	NLM002_scaffold3727_2	-	562	506	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-300	NLM032_scaffold28_2	-	5783	5727	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-301	NOM017_scaffold25928_6	-	5948	5892	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-302	ADJS01016621.1	-	17385	17329	RNA → RpsM (COG0099)rpsM (PRK05179) →

env-303	SRS014313_C2608362	+	174	230	RNA →
env-304	SRS018817_C1977109	+	122	178	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-305	SRS055982_C1571339	-	222	166	RNA →
Bwe-2-1	NZ_AXVN01000046.1	-	11240	11184	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-306	SRS018656_C1701680	+	38	94	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-307	scaffold21840_1_V1.UC-7	+	171	227	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-308	SRS018313_C7804088	+	115	171	RNA →
env-309	DLM023_scaffold15800_4	+	58	114	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-310	NLF008_scaffold4177_4	-	264	208	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-311	NLM031_scaffold8043_12	-	1012	956	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-312	NOM009_scaffold9194_1	-	1168	1112	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-313	NOM005_scaffold12219_1	-	576	520	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-314	NOM026_scaffold20027_3	-	755	699	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-315	ADJT01012175.1	-	11015	10959	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-316	SRS050422_LANL_scaffold_5427	+	241	297	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-317	SRS015782_C3373209	+	501	557	RNA →
env-318	SRS049712_C15436136	+	274	330	RNA →
Bwe-1-1	NZ_AUJF01000003.1	+	23323	23379	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-319	NLM017_scaffold23522_6	+	25	81	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-320	DOF008_scaffold4797_1	-	4686	4630	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-321	scaffold37948_1_O2.UC-19	-	326	270	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-322	SRS058770_C1599846	-	411	355	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-323	DOF010_scaffold104_3	-	22883	22827	RNA → RpsM (COG0099)rpsM (PRK05179) →
Rsp-2-1	NZ_ACII02000003.1	-	3053178	3053122	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-324	SRS016495_C1820935	-	194	138	RNA → hypo →
env-325	NOM028_scaffold3211_4	-	15906	15850	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-326	scaffold437_1_V1.CD-11	-	717	661	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-327	CAM_READ_0099454135	+	66	121	RNA → ←hypo
env-328	SRS014923_WUGC_scaffold_34760	+	156	211	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-329	longitudinal_439_8	+	13623	13679	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-330	longitudinal_440_169	-	13322	13266	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-331	NLM008_scaffold23270_1	-	432	376	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-332	NLM027_scaffold39514_1	-	666	610	RNA → RpsM (COG0099)rpsM (PRK05179) → hypo →
env-333	longitudinal_20_244	-	8699	8643	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-334	longitudinal_53_558	+	42312	42368	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-335	ADJT01008964.1	+	1183	1239	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-336	SRS015217_WUGC_scaffold_18288	+	246	302	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-337	4491417.3_NODE_73162	-	21524	21468	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_polLL (pfam01193) → RpoA (COG0202)PRK05182 (PRK05182) →
env-338	DOM026_scaffold12352_13	-	3568	3512	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-339	longitudinal_122_170	+	39841	39897	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-340	SRS014235_C3388785	+	157	213	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-341	SRS014923_WUGC_scaffold_42123	+	33	89	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-342	scaffold34343_3_MH0002	+	128	184	RNA → RpsM (COG0099)rpsM (PRK05179) →
Bsc-1-1	NZ_JNKJ01000057.1	+	1161	1217	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →

Rsp-3-1	NZ_HE978651.1	-	2529298	2529242	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-343	AUXO012074612.1	+	242	300	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309) →
env-344	DLM009_scaffold871.6	-	3189	3114	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-345	NLM027_scaffold5861.18	-	15285	15210	rplQ (PRK05591)Ribosomal_L17 (pfam01196) → RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → PRK13337 (PRK13337)LCB5 (COG1597) →
env-346	CAM_READ_0099493925	+	211	286	MntP (COG1971)spore_YtaF (TIGR02840) → RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-347	4444164.3.49013	+	211	286	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-348	scaffold12778.1.V1.CD-12	+	467	542	RNA →
env-349	SRS018313_C7798604	+	179	254	RNA →
env-350	DLF012_scaffold123.4	+	22132	22207	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → PRK13337 (PRK13337)LCB5 (COG1597) → MntP (COG1971)spore_YtaF (TIGR02840) →
Lba-8-1	NZ_GL890549.1	-	179387	179312	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → PRK13337 (PRK13337)LCB5 (COG1597) → MntP (COG1971)spore_YtaF (TIGR02840) →
Bha-1-1	NZ_GG698590.1	-	537224	537149	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) → PRK13337 (PRK13337)LCB5 (COG1597) → MntP (COG1971)spore_YtaF (TIGR02840) →
env-351	CAM_READ_0100338075	+	116	191	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-352	4448819.3.Contig30791	+	5	75	RNA → rpsM (PRK05179) →
env-353	longitudinal_51_247	-	34515	34458	RNA → hypo → RpsM (COG0099)rpsM (PRK05179) →
Rga-1-1	NZ_AUDP01000014.1	-	27539	27482	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-354	AUXO015947882.1	-	158	103	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-355	JGI994J12354_10010207	+	5480	5533	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-356	IMNBL1.c0108913	-	287	234	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-357	JGI994J12354_10000026	+	7090	7145	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-358	2227591299	-	3740	3685	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-359	IMNBL1.c0000019	+	10768	10823	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-360	JGI994J12354_10094008	+	12	69	RNA → ←hypo
env-361	IMNBL1.c0036661	+	988	1043	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-362	JGI994J12354_10002700	-	15440	15385	RNA → ←hypo
env-363	IMNBL1.c0023149	+	2251	2307	RNA →
env-364	2227528282	+	222	278	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-365	JGI994J12354_10567539	-	328	272	RNA → hypo → rps13 (CHL00137)rpsM (PRK05179) →
env-366	2227243856	+	905	961	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-367	scaffold568.3_MH0038	-	330	279	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-368	scaffold119982.1_MH0056	-	332	281	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-369	scaffold11215.5_MH0063	+	300	351	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-370	scaffold3544.6_MH0074	+	523	574	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-371	scaffold17454.3_O2.UC-22	+	3387	3438	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-372	scaffold71124.1.V1.CD-8	-	108	57	RNA →
env-373	scaffold75223.1.V1.UC-9	-	362	311	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-374	4491417.3.NODE.67088	-	675	624	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-375	DLM027_scaffold24464.1	-	728	677	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-376	SRS016095_WUGC_scaffold.30576	+	143	194	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-377	SRS012273_C3777396	+	2744	2795	RNA →

env-378	SRS014313_C2660173	+	568	619	RNA →
env-379	SRS014979_C2995935	+	209	260	RNA →
env-380	SRS015217_C2217440	+	360	411	RNA →
env-381	SRS017433_C1676010	-	110	59	RNA → hypo →
env-382	SRS051882_C2517682	-	110	59	RNA →
env-383	SRS018817_C2062093	+	582	633	RNA →
env-384	SRS050422_LANL_scaffold.21144	-	743	692	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-385	scaffold1165_1.V1.CD-4	-	107	56	RNA →
env-386	DLM009_scaffold18031_8	+	36254	36305	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-387	DLM028_scaffold14333_2	-	459	408	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-388	NLM027_scaffold1108_2	-	1341	1290	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → S4 (smart00363)RpsD (COG0522) →
env-389	SRS015782_C3477872	+	2144	2195	RNA →
env-390	DOM013_scaffold7638_5	+	299	350	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182)RNA_polL (pfam01193) →
env-391	scaffold52941_2.MH0011	-	294	243	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-392	scaffold841_6.MH0037	+	2857	2908	RNA →
env-393	scaffold93665_1.MH0043	-	356	305	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-394	scaffold44089_3.MH0060	+	396	447	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-395	scaffold9918_1.MH0068	-	106	55	RNA →
env-396	scaffold61996_1.MH0082	-	326	275	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-397	scaffold49998_1.V1.CD-14	-	295	244	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-398	scaffold12031_1.V1.UC-15	-	266	215	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-399	4491410.3.NODE.7014	+	1319	1370	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-400	4491413.3.NODE.68514	-	12266	12215	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-401	DOF008_scaffold23304_2	-	4645	4594	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-402	DOM018_scaffold30267_2	-	9330	9279	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-403	NLM032_scaffold1492_2	-	4705	4654	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-404	ADJS01016619.1	+	2886	2937	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)RibosomalL17 (pfam01196) →
env-405	DLF014_scaffold5097_1	-	28650	28599	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-406	DLM016_scaffold2418_6	-	2957	2906	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-407	DOM026_scaffold10557_10	+	15236	15287	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-408	NOF012_scaffold6209_1	+	350	401	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-409	SRS014235_WUGC_scaffold.106228	-	130	79	RNA →
env-410	SRS022071_C2808073	-	121	70	RNA → hypo →
env-411	SRS064276_LANL_scaffold.18813	-	435	384	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-412	4491401.3.NODE.45574	+	56	107	RNA → rps13 (CHL00137)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-413	DLM018_scaffold30918_1	+	2	53	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-414	DOF003_scaffold5613_4	+	314	365	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → hypo →
env-415	DOF012_scaffold4673_1	+	384	435	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-416	NOF002_scaffold2669_5	-	615	564	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-417	NOM009_scaffold2007_2	-	2031	1980	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-418	NOM001_scaffold9282_1	-	151	100	RNA → rps13 (CHL00137)rpsM (PRK05179) →

env-419	SRS052697_LANL_scaffold_51469	+	80	131	RNA	→
env-420	scaffold85473_2_MH0025	+	479	530	RNA	→
env-421	scaffold52584_3_MH0045	+	1009	1060	RNA	→
env-422	scaffold37252_4_MH0062	+	528	579	RNA	→
env-423	scaffold96444_3_MH0069	+	741	792	RNA	→
env-424	scaffold2364_1_MH0071	-	108	57	RNA	→
env-425	scaffold88060_1_MH0083	-	108	57	RNA	→
env-426	scaffold91363_1_V1.UC-10	+	544	595	RNA	→
env-427	scaffold83915_1_V1.UC-8	-	108	57	RNA	→ hypo
env-428	SRS020233_C3818898	+	153	205	RNA	→
env-429	SRS024132_C3632946	-	167	115	RNA	→ hypo
env-430	SRS050422_LANL_scaffold_88482	+	593	645	RNA	→
env-431	SRS064276_C2411397	-	185	133	RNA	→ hypo
env-432	UnmappedStool_Broad_scaffold_502667	-	347	295	RNA	→ rps13 (CHL00137)rpsM (PRK05179)→
env-433	AUXO010373404.1	+	958	1008	RNA	→ rps13 (CHL00137)rpsM (PRK05179)→
env-434	UnmappedStool_Broad_C251835313	+	227	284	RNA	→
Bhy-1-1	NZ_GG657686.1	+	284181	284238	RNA	→ RpsM (COG0099)rpsM (PRK05179)→
env-435	AUXO015141686.1	-	737	687	RNA	→ ←hypo
env-436	AUXO012457309.1	+	505	561	RNA	→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→
env-437	AUXO017593349.1	-	353	299	RNA	→ RpsM (COG0099)rpsM (PRK05179)→
env-438	AUXO011871861.1	+	122	174	RNA	→ rps13 (CHL00137)rpsM (PRK05179)→
Bsp-7-1	NZ_AUIX01000015.1	+	102241	102293	RNA	→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→
Bsp-9-1	NZ_AUJO01000032.1	+	17808	17860	RNA	→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→
Bsp-5-1	NZ_KE384159.1	-	74816	74764	RNA	→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→
Bsp-4-1	NZ_KE384144.1	+	253197	253249	RNA	→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→
Bsp-2-1	NZ_ATVV01000009.1	-	41473	41421	RNA	→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→
Bsp-8-1	NZ_KE384200.1	+	31158	31210	RNA	→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→
Bsp-3-1	NZ_JNLQ01000002.1	+	492386	492438	RNA	→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→
Bpr-2-1	NZ_KB892647.1	+	780	851	RNA	→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ rplQ (PRK05591)RibosomalL17 (pfam01196)→

16.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 16.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one S4-

cd00207 (5) 2Fe-2S iron-sulfur cluster binding domain.
cd06928 (3) N-terminal domain of the Alpha subunit of Bacterial RNA polymerase.
CHL00041 (2) ribosomal protein S11
CHL00137 (46) ribosomal protein S13; Validated
COG0099 (345) Ribosomal protein S13 [Translation, ribosomal structure and biogenesis]
COG0100 (189) Ribosomal protein S11 [Translation, ribosomal structure and biogenesis]
COG0202 (99) DNA-directed RNA polymerase, alpha subunit/40 kD subunit [Transcription]
COG0493 (5) NADPH-dependent glutamate synthase beta chain or related oxidoreductase [Amino acid transport and metabolism, General function prediction only]
COG0522 (132) Ribosomal protein S4 or related protein [Translation, ribosomal structure and biogenesis]

Clostridia RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 16.2.

COG1576 (5) NAD-dependent dihydropyrimidine dehydrogenase, PreA subunit [Nucleotide transport and metabolism]
COG1597 (4) Diacylglycerol kinase family enzyme [Lipid transport and metabolism, General function prediction only]
COG1891 (5) NADH:ubiquinone oxidoreductase, NADH-binding 51 kD subunit (chain F) [Energy production and conversion]
COG1971 (4) Putative Mn2+ efflux pump MntP [Inorganic ion transport and metabolism]
pfam00163 (1) Ribosomal protein S4/S9 N-terminal domain.
pfam01193 (2) RNA polymerase Rpb3/Rpb11 dimerisation domain.
pfam01196 (44) Ribosomal protein L17.
pfam02256 (5) Iron hydrogenase small subunit.

env-77
 env-78
 env-79
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 Rgn-1-1
 env-82
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 env-92
 env-93
 env-94
 Lba-11-1
 env-95
 env-96
 env-97
 Dsp-3-1
 Dsp-1-1
 env-101
 env-102
 Dsp-2-1
 env-103
 env-106
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 Dlo-1-1
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 env-149
 env-150
 env-151
 Chy-1-1
 env-152
 env-153
 env-154
 Esp-1-1
 env-155
 env-156
 env-159
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 env-172
 env-175
 env-176
 env-177
 env-178
 Lba-4-1
 env-179
 Cba-3-1
 [sc-1-1
 Lba-7-1
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 env-186
 env-187
 env-188

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CCUGCGUAAAGACAGAUUGGAAAGAUUAUAGGGCGAAAGCCCGCAUCGAGA.....

GCAGAAUUCGAGGACGAAAUAGGGCGCCAGCCCAUCAUCGAGCCGAGCAAAGCGGAGGCGAGAUGUGCAUUUCGA.....

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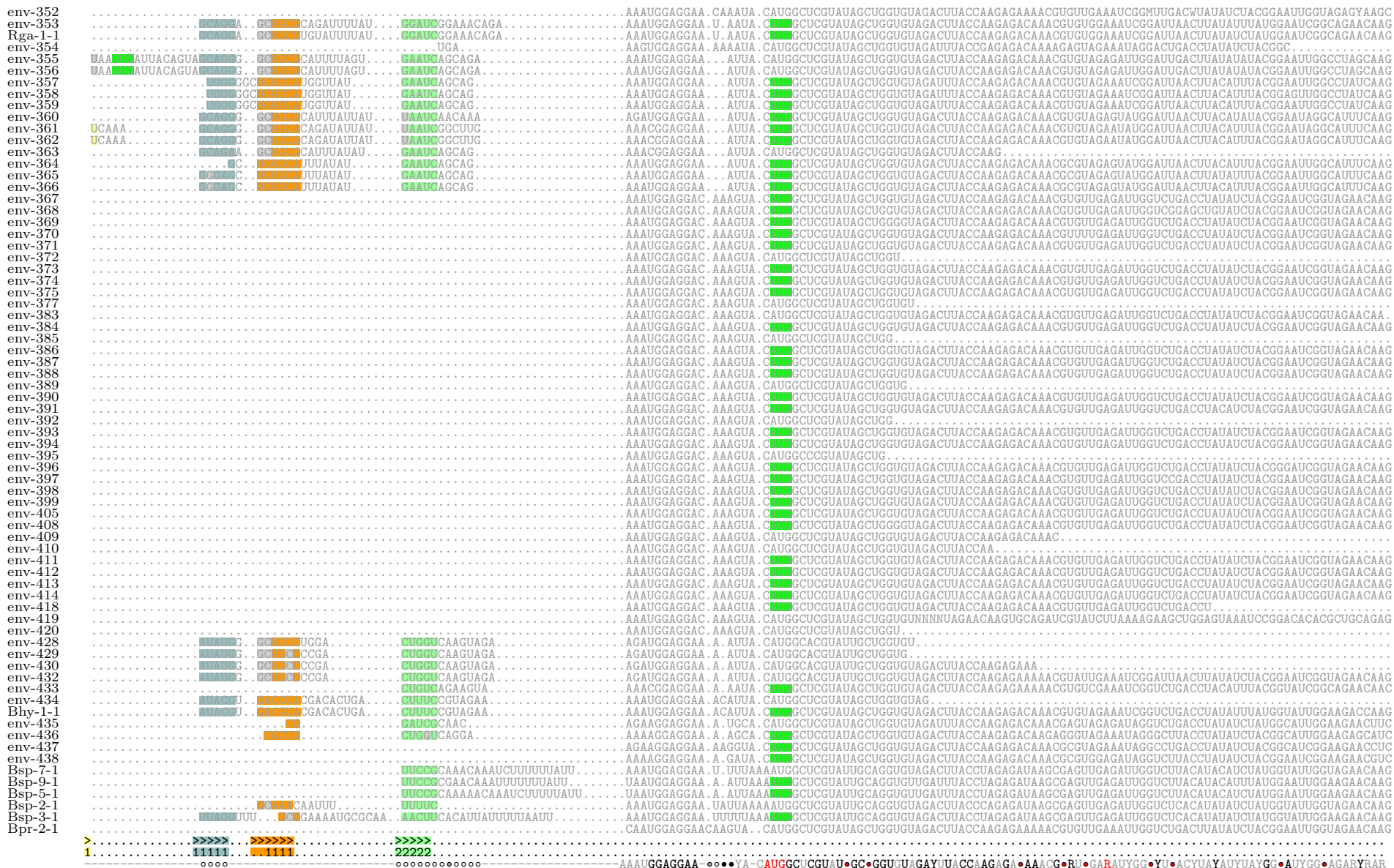

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env-306 .....UUCG
env-307 .....UUCG
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env-323 .....UUUG
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env-327 .....UUCG
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env-332 .....A
env-335 .....A
env-336 .....A
env-337 .....A
env-338 .....A
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env-342 .....A
Bsc-1-1 .....
Rsp-3-1 .....
env-343 .....
env-344 .....
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env-353 .....
Rga-1-1 .....
env-354 .....
env-355 .....UCCU
env-356 .....UCCU
env-357 .....
env-358 .....
env-359 .....
env-360 .....
env-361 .....GUGC
env-362 .....GUGC
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env-368 .....
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env-386 .....

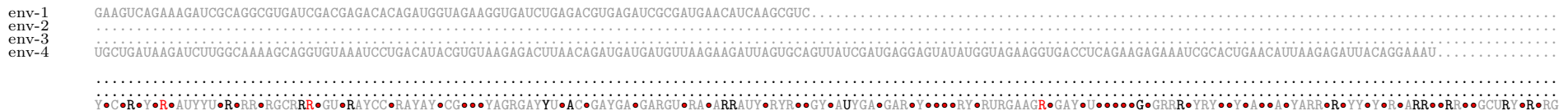
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Cba-1-1
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Bwe-1-1
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env-335
env-336
env-337
env-338
env-339
env-340
env-341
env-342
Bsc-1-1
Rsp-3-1
env-343
env-344
env-346
env-348
env-349
env-350
env-351





alignment positions 901 ··· 1080




```

env-428 .....
env-429 .....
env-430 .....
env-432 CGCUACCCGUAUUCUGGAAGCAGCUAAUUGAUAUCCGAACACCCGUGUAGAGAUUACCGGACGAAGUAAAAAGAAUACAGUGCUGUAUUCGAUGAGACUCAGACUGUAG
env-433 UUCCAACAAGA .....
env-434 .....
Bhy-1-1 UGCAACUCGGCAUCUCGGCUGAUGCGAAAUAUUCUGGACACUCUGUUAAGAGAUUUGACAGCAGAAAGUAAAACAGAAUCCGUAAGUGAUGAGAGACUUAUGUAGGUGGAGGUGAUCUGAGAAGAGAUUCGUCUGAAUAUCAAGAGACUUCAGGAGAUUGGUGCUACAGAGG
env-435 UUCCAAUCGUAUUCUUGCGCAGGCCGGCGUUAACCCGGUAUCCCGUGUCAGAGAUUCAGACCGUAAGAGACGAGGUAAGAAUCCGUGGUAUCGAAAGAGACCCAGGUCUGAAGGUGAUCUGAGACGUGAAGUUGCUAUGAACAUCAACCGUCUUCAGGAGAUCCGUGCUACCGCGG
env-436 UUCCAAUCGUAUUCUUGCGCAGGCCGGCGUUAUUCGGUAUACACGUGUGAGAGAUUCAGAGAAAGUAAAACCCGGAGUAUUCGACGAGACUCAGACCGUAAGAGGUGAUCUGAGACGUCAGGUUGCAUGGAUCAAACGUCUUCAGGAGAUCCGUGCUAUCGUGG
env-437 UUCCAAACCGUAUUCUGGUGACGCGAGGUGUAGCCGAUAUACACGCGUUCGUGAUUCUACGGACGACGAAGUAAAAGAAUCCGUUCGUGAUCGAAAGAGACACAGGUUGAAGGUGAUCUUCGAGACAGCCGUAUGGAUCAAACCGUCUUCAGGAGAUCCGUGCUACCGCGG
env-438 UUCCAAACCGUAUUCUGGUGAUCGCGGAGUAGAUCCCAUUCACCGGUGUCGUGAUUCUUAUGAAGA .....
Bsp-7-1 CUCAAACAAAUAUCUUGCUGCUGCAAAUUAUACCCGGACACACGUGUUCGUGAUUCUACAGAUAGAGGUUAAAGAAUUCGUGAUAUCGUAACGUAUUGACGUAAGGUGAUCUUAAGAGAGAUUCGUAUGAACAUCAACCGUCUUCAGAAAUCGGAUGCUACAGAGG
Bsp-9-1 CUCAAACAAAUAUCUUGAGGUCGCAAAAGUAAAACCCGGACACACGUGUUCGUGAUUCUACAGAUAGAGUAAAGAAUUCGUAUUGAAGUAGAGGUGAUCUUAAGAGAGAAAUCGUAUGAACAUCAACCGUCUUCAGAGAUCCGUGCUACAGAGG
Bsp-5-1 CUCAAACAAAUAUCUUGAGGUUUCAAAAGUAAAACCCGGACACACGUGUUCGUGAUUCUACAGAUAGAGUAAAGAAUUCGAGAUUUCGUAAGGUAUUGAAGUAGAGGUGAUCUUAAGAGAGAAAUCGUAUGAACAUCAACCGUCUUCAGAGAUCCGUGCUACAGAGG
Bsp-2-1 CUCAAACAAAUAUCUUGCUGCUGCAAAUUAUUCGGACACACGUGUUCGUGAUUCUACAGAUAGAGUAAAGAAUUCGUGAUAUUCGUAUUGACGUAAGGUGAUCUUAAGAGAGAAAUCGUAUGAACAUCAACCGUCUUCAGAAAUCGGAUGCUACAGAGG
Bsp-3-1 CUCAAUAAGAUUCUUGCUGCUGCAAAUUAUUCGGACACACGUGUUCGUAUUCUACAGAUAGAGUAAAGAAUUCGUGAUAUUCGUAUUGACUAGACGUAAGGUGAUCUUAAGAGAGAAAUCGUAUGAACAUCAACCGUCUUCAGAAAUCGGAUGCUACAGAGG
Bpr-2-1 CGCUGACCGUAUCUUAAGUAGAGGCGAGGUAUAAACCCGGACACUCGCGCAGGGAAUUGACUGACGAAGAAUAGGAAAAUCCGUAUGCAUCGUAAGGUGAUCUGAGAAGAGAAAUCGUCUGAACAUCAAGAGAUUACAGGAAUCCGGAUGCUACAG

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Y•C•R•Y•R•AUYYU•R•RR•RGCR•RR•GU•RAYCC•RAYAY•CG•••YAGRGAYU•Y•AC•GAYGA•GARGU•RA•ARRAU•RYR••GY•AUTGA•GAR•Y••••RY•RURGA•GR•GAY•U•••••G•GRRR•YRY••Y•A••YARR•R•YT•Y•R•ARR••RR••GCUR•Y•R•RG

alignment positions 1081...1117

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env-1 .....
env-2 .....
env-3 .....
env-4 .....
env-5 .....
env-6 .....
env-7 .....
env-8 .....
env-9 .....
env-10 UAUCCGUCAUAGAAAAGGGUUCUCCUGUUCGUGGUCAG
env-11 UAUCCGUCAUAGAAAAGGGUUCUCCUGUUCGUGGUCAG
env-12 UAUCCGUCAUAGAAAAGGGUUCUCCUGUUCGUGGUCAG
env-13 UAUCCGUCAUAGAAAAGGGUUCUCCUGUUCGUGGUCAG
env-14 .....
env-16 AAUCCGUCACAGAAAAGGACUUCGUGUUCGCGGUCAG
env-17 AAUCCGUCACAGAAAAGGACUUCGUGUUCGCGGUCAG
env-18 AAUUCGUCAUAGAAAAGGACUUCGAGUUCGUGGUCAG
Bsp-6-1 UAUUCGUCAUAGAAAGAGCCUUCUGUUCGUGGUCAG
env-20 CAUUCGUCACAGAAAAGGACUUCGUGUUCGCGGUCAG
env-21 UGUUCGCCACAGAAAGGACUUCUGUUCGUGGACAG
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env-32 UAUCCGUCAUAGAAAAGGACUUCUGUUCGUGGUCAG
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env-34 .....
env-35 .....
env-36 .....
env-37 .....
env-38 .....
env-39 .....
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env-49 UGUCCGCCACAGAAAAGGACUUCUGUUCGCGGUCAG
env-50 AAUCCGUCAUAGAAAAGGACUUCGUGUUCGUGGACAG
Dma-1-1 GAUUCGUCAUAGAAAAGGACUUCUGUUCGCGGUCAG
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[ce-1-1 UGGCAAAACGUCACAGAGUAGGACUUCUGUUCGUGGA
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env-59 AAUCCGUCACAGAAAAGGACUUCGUGUUCGUGGUCAG
env-60 AAUCCGUCACAGAAAAGGACUUCGUGUUCGUGGUCAG
env-62 .....
env-63 .....

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R•Y•RYCAY•R•ARARG•••CY•RU•CRYRG•YRR

env-64
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 env-67 AAUCCGUCACAGAAAAGGACUUCGGUACGUGGUCAG
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 Rgn-1-1 AAUCCGUCACAGAAAAGGACUUCGGUACGUGGUCAG
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 Dsp-2-1 AAUCCGUCACAGAAAAGGACUUCGGUUCGUGGUCAG
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 env-181
 env-182

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 env-185
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 Cba-1-1 AGGAAUCCGCCACAGAAAAGGACUUCGGUUCGUGGA
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.....
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 env-304
 env-305
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 env-341
 env-342
 Bsc-1-1 UAUCCGUAUCGUAAAAGGACUCCGGUUCGUGGUCAG
 Rsp-3-1 UAUCCGUAUCGUAAAAGGACUCCGGUUCGUGGUCAG
 env-343 UAUCCGUAUAGAAAAGGACUCCGGUUCGUGGUCAG
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 env-364 AAUCC
 env-365
 env-366 AAUCC
 env-367
 env-368
 env-369
 env-370
 env-371
 env-372
 env-373 UAUCCG
 env-374 NNGUCAGGUUGAGAAAAGGAGAUCCUUGUAGAGAAAUC

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 •R•Y•RYCAY•R•ARARGR•••CY•RU•CRYRG•YRR


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env-375 UAUCCGUCaucguAAAGGCCUUCGGUUCGUGGUCAG
env-377 .....
env-383 GGUCCUAAGGAAACUGUUGCAAUAAGAAGAAUAAU
env-384 .....
env-385 UAUCCGUCaucguAAAGGCCUUCGGUUCGUGGUCAG
env-386 GAUCCGUCaucguAAAGGCCUUCGGUUCGUGGUCAG
env-387 UAUCCGUCaucguAAAGGCCUUCGGUUCGUGGUCAG
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env-391 .....
env-392 .....
env-393 .....
env-394 .....
env-395 .....
env-396 .....
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env-405 UAUCCGUCaucguAAAGGCCUUCGGUUCGUGGUCAG
env-408 .....
env-409 .....
env-410 .....
env-411 GAACUGUUGCAAUAAGAAGAAUAUUUAACCAGUA
env-412 GAGAUUCUCGUAAGAAAUCGCUAUGAACAUCAAACG
env-413 UAUCCGUCaucguAAAGGCCUUCGGUUCGUGGUCAG
env-414 UAUCCGUCaucguAAAGGCCUUCGGUUCGUGGUCAG
env-418 .....
env-419 .....
env-420 .....
env-428 .....
env-429 .....
env-430 .....
env-432 .....
env-433 .....
env-434 .....
Bhy-1-1 UAUCCGUCaucguAAAGGCCUUCGGUUCGUGGUCAG
env-435 UAUCCGUCaucguAAAGGCCUUCGGUUCGUGGUCAG
env-436 AAUCCGUCaucguAAAGGCCUUCGGUUCGUGGUCAG
env-437 CAU.....
env-438 .....
Bsp-7-1 AAUCCGUCacagaAGAGGACUUCUGUUCGUGGUCAG
Bsp-9-1 AAUUCGUCacagaAGAGGACUUCUGUUCGUGGUCAG
Bsp-5-1 AAUCCGUCacagaAGAGGACUUCUGUUCGUGGUCAG
Bsp-2-1 UAUCCGUCacagaAGAGGACUUCUGUUCGUGGUCAG
Bsp-3-1 UAUUCGUCacagaAGAGGACUUCUGUUCGUGGUCAG
Bpr-2-1 AGGAAUCCGUCacagaAGAGGACUUCGGUUCGUGGA
.....
R•Y•RYCAY•R•ARARGR•••CY•RU•CRYRG•YRR

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17 S4-Fusobacteriales

17.1 Taxa

The taxonomy of each organism containing a putative S4-Fusobacteriales RNA is listed, with abbreviations identifying each hit (e.g., “Eco-1-1” and “Eco-1-2” might hypothetically represent two distinct RNAs in *E. coli*). The abbreviations will be used to identify each individual S4-Fusobacteriales RNA in Sections 17.2 and 17.4:

abbrev. of hits	taxonomy of species
Cso-1-1	Bacteria Fusobacteria Fusobacteriales Fusobacteriaceae <i>Cetobacterium somerae</i> ATCC BAA-474
Csp-1-1	Bacteria Fusobacteria Fusobacteriales Fusobacteriaceae <i>Cetobacterium</i> sp. ZOR0034
Csp-2-1	Bacteria Fusobacteria Fusobacteriales Fusobacteriaceae <i>Cetobacterium</i> sp. ZWU0022
Fgo-1-1	Bacteria Fusobacteria Fusobacteriales Fusobacteriaceae <i>Fusobacterium gonidiaformans</i> ATCC 25563
Fhw-1-1	Bacteria Fusobacteria Fusobacteriales Fusobacteriaceae <i>Fusobacterium hwasookii</i> ChDC F145
Fhw-2-1	Bacteria Fusobacteria Fusobacteriales Fusobacteriaceae <i>Fusobacterium hwasookii</i> ChDC F174
Fhw-3-1	Bacteria Fusobacteria Fusobacteriales Fusobacteriaceae <i>Fusobacterium hwasookii</i> ChDC F206
Fhw-4-1	Bacteria Fusobacteria Fusobacteriales Fusobacteriaceae <i>Fusobacterium hwasookii</i> ChDC F300
Fmo-1-1	Bacteria Fusobacteria Fusobacteriales Fusobacteriaceae <i>Fusobacterium mortiferum</i> ATCC 9817
Fne-1-1	Bacteria Fusobacteria Fusobacteriales Fusobacteriaceae <i>Fusobacterium necrophorum</i> BFTR-1

Fne-2-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium necrophorum</i> BFTR-2
Fne-3-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium necrophorum</i> BL
Fne-4-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium necrophorum</i> D12
Fne-5-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium necrophorum</i> DAB
Fne-6-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium necrophorum</i> DJ-1
Fne-7-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium necrophorum</i> DJ-2
Fne-8-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium necrophorum</i> HUN048
Fne-9-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium necrophorum</i> subsp. <i>funduliforme</i> ATCC 51357
Fne-10-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium necrophorum</i> subsp. <i>funduliforme</i> B35
Fne-11-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium necrophorum</i> subsp. <i>funduliforme</i> Fnf 1007
Fnu-1-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> 13.3C
Fnu-2-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> CC53
Fnu-9-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> ChDC F128
Fnu-3-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> CTI-1
Fnu-4-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> CTI-2
Fnu-5-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> CTI-3
Fnu-6-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> CTI-5
Fnu-7-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> CTI-6
Fnu-8-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> CTI-7
Fnu-11-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>animalis</i> 11.3.2
Fnu-12-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>animalis</i> 21.1A
Fnu-13-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>animalis</i> 3.1.33
Fnu-14-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>animalis</i> 4.8
Fnu-15-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>animalis</i> 7.1
Fnu-16-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>animalis</i> ChDC F324
Fnu-17-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>animalis</i> F0419
Fnu-18-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>fusiforme</i> ATCC 51190
Fnu-19-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>nucleatum</i> ATCC 23726
Fnu-20-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>nucleatum</i> ATCC 25586
Fnu-21-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>nucleatum</i> ChDC F316
Fnu-22-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>polymorphum</i> ATCC 10953
Fnu-23-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>polymorphum</i> F0401
Fnu-24-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>vincentii</i> 3.1.27
Fnu-25-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>vincentii</i> 3.1.36A2
Fnu-26-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>vincentii</i> 4.1.13
Fnu-27-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>vincentii</i> ATCC 49256
Fnu-28-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> subsp. <i>vincentii</i> ChDC F8
Fnu-10-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium nucleatum</i> W1481
Fpe-1-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium perfoetens</i> ATCC 29250
Fpe-2-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium periodonticum</i> 2.1.31
Fpe-3-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium periodonticum</i> ATCC 33693
Fpe-4-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium periodonticum</i> D10
Fru-1-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium russii</i> ATCC 25533
Fsp-1-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium</i> sp. 1.1.41FAA
Fsp-2-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium</i> sp. 3.1.5R
Fsp-3-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium</i> sp. CM1
Fsp-4-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium</i> sp. CM21
Fsp-5-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium</i> sp. CM22
Fsp-6-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium</i> sp. OBRC1
Fsp-7-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium</i> sp. oral taxon 370 str. F0437
Ful-1-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium ulcerans</i> 12-1B
Ful-2-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium ulcerans</i> ATCC 49185
Fva-1-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Fusobacterium varium</i> ATCC 27725
Ipo-1-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Ilyobacter polytropus</i> DSM 2926
Lbu-1-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Leptotrichia buccalis</i> DSM 1135
Lgo-1-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Leptotrichia goodfellowii</i> F0264
Pat-1-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Psychrilyobacter atlanticus</i> DSM 19335
Ste-1-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Sebaldella termitidis</i> ATCC 33386
Smo-1-1	Bacteria	Fusobacteria	Fusobacteriales	Fusobacteriaceae	<i>Streptobacillus moniliformis</i> DSM 12112
Lgo-2-1	Bacteria	Fusobacteria	Fusobacteriales	Leptotrichiaceae	<i>Leptotrichia goodfellowii</i> DSM 19756
Lsh-1-1	Bacteria	Fusobacteria	Fusobacteriales	Leptotrichiaceae	<i>Leptotrichia shahii</i> DSM 19757
Lsp-1-1	Bacteria	Fusobacteria	Fusobacteriales	Leptotrichiaceae	<i>Leptotrichia</i> sp. oral taxon 212
Lsp-2-1	Bacteria	Fusobacteria	Fusobacteriales	Leptotrichiaceae	<i>Leptotrichia</i> sp. oral taxon 215 str. W9775
Lsp-3-1	Bacteria	Fusobacteria	Fusobacteriales	Leptotrichiaceae	<i>Leptotrichia</i> sp. oral taxon 225 str. F0581
Lsp-4-1	Bacteria	Fusobacteria	Fusobacteriales	Leptotrichiaceae	<i>Leptotrichia</i> sp. oral taxon 879 str. F0557

Ltr-1-1	Bacteria Fusobacteria Fusobacteriales Leptotrichiaceae <i>Leptotrichia trevisanii</i> DSM 22070
Lwa-1-1	Bacteria Fusobacteria Fusobacteriales Leptotrichiaceae <i>Leptotrichia wadei</i> DSM 19758
Lwa-2-1	Bacteria Fusobacteria Fusobacteriales Leptotrichiaceae <i>Leptotrichia wadei</i> F0279
Sam-1-1	Bacteria Fusobacteria Fusobacteriales Leptotrichiaceae <i>Sneathia amnii</i>
env-1 to env-482	environmental samples

17.2 Gene contexts

Each S4-Fusobacteriales RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one S4-Fusobacteriales RNA are assigned a color; other domains are gray. Information about these con-

served domains is given in Section 17.3. The accession of the sequence containing each S4-Fusobacteriales RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each S4-Fusobacteriales RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 17.1.

abbrev.	Seq. accession		5′ at	3′ at	genes
env-1	4448820.3.Contig_4724	-	1508	1444	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-2	4444165.3.02425	-	1233	1174	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ PRK05309 (PRK05309)RpsK (COG0100)→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-3	4448815.3.Contig29902	-	527	468	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-4	SRS064449.LANL_scaffold_2211	+	364	426	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→
env-5	SRS043239.WUGC_scaffold_38909	-	221	159	RNA→ rps13 (CHL00137)rpsM (PRK05179)→
env-6	SRS024318.LANL_scaffold_10757	-	103	41	RNA→
env-7	LWFCAn_GLO1YSU01C2O9I	+	165	222	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-8	SRS019124.C1397861	+	326	392	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→
env-9	SRS019125.WUGC_scaffold_10350	+	92	158	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ rplQ (PRK05591)Ribosomal_L17 (pfam01196)→
env-10	SRS013506.C1110483	-	685	618	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→
env-11	CAM_READ_0099908967	-	481	418	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-12	CAM_READ_0100166989	+	129	189	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-13	CAM_READ_0099986119	-	478	417	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-14	CAM_READ_0099775883	-	476	416	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-15	CAM_READ_0099873361	-	474	414	RNA→ RpsM (COG0099)uS13_bact (TIGR03631)→
env-16	CAM_READ_0100181569	+	35	95	RNA→
env-17	4444165.3.00747	-	3020	2960	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ rpsD (PRK05327)→ S4 (smart00363)RpsD (COG0522)→
env-18	CAM_READ_0100128399	-	372	312	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-19	CAM_READ_0100169721	+	35	95	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-20	4444164.3.01074	+	805	865	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ PRK05182 (PRK05182)RNA_pol_L (pfam01193)→
Fpe-1-1	NZ_JHXW01000013.1	+	27498	27558	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)PRK05182 (PRK05182)→ RplQ (COG0203)rplQ (PRK05591)→ hypo→
env-21	CAM_READ_0099877645	+	39	98	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-22	4444164.3.00319	+	39	98	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-23	4444164.3.51166	+	542	602	RNA→ RpsM (COG0099)rpsM (PRK05179)→

env-24	CAM_READ_0099837051	-	423	363	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-25	SRS023604_Baylor_scaffold_1939	+	279	366	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-26	SRS011111_C480900	+	8	95	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-27	SRS023604_Baylor_scaffold_1904	+	280	370	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-28	SRS017497_Baylor_scaffold_808	+	42316	42406	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → Acetyltransf_1 (pfam00583)Acetyltransf_7 (pfam13508) →
Sam-1-1	NZ_CP011280.1	+	495384	495474	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → Acetyltransf_1 (pfam00583)Acetyltransf_7 (pfam13508) →
env-29	SRS011111_Baylor_scaffold_6158	+	13925	14015	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → Acetyltransf_1 (pfam00583)Acetyltransf_7 (pfam13508) → PRK00326 (PRK00326)MraZ_N (cd16320)MraZ_C (cd16321) → RmsH (COG0275)PRK00050 (PRK00050) → hypo →
Ste-1-1	NC_013517.1	-	4215417	4215353	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Smo-1-1	NC_013515.1	+	399617	399698	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → hypo → hypo → hypo → hypo →
env-30	SRS016319_C3906942	-	367	278	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-31	SRS049389_C4596854	+	103	192	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-32	SRS015762_C3360097	+	103	192	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-33	SRS016225_C2898664	-	373	284	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-34	SRS017120_Baylor_scaffold_77919	+	569	658	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-35	SRS019219_WUGC_scaffold_70719	-	373	284	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-36	SRS023352_LANL_scaffold_52359	+	475	564	RNA →
env-37	SRS016569_C2417077	-	376	287	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-38	SRS019026_C1965129	+	158	247	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-39	SRS019027_C1950830	+	158	247	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-40	SRS019028_WUGC_scaffold_55374	-	365	276	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-41	SRS017076_C2662400	+	122	211	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-42	SRS014271_WUGC_scaffold_3488	-	457	368	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-43	SRS014470_WUGC_scaffold_45929	-	373	284	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-44	SRS014573_WUGC_scaffold_53471	-	376	287	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-45	SRS015057_WUGC_scaffold_36508	-	376	287	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-46	SRS019607_WUGC_scaffold_48886	-	645	556	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-47	SRS021496_Baylor_scaffold_82145	+	106	195	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-48	SRS044373_WUGC_scaffold_7895	+	106	195	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-49	SRS047219_WUGC_scaffold_21972	+	933	1022	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-50	SRS047824_WUGC_scaffold_46958	-	645	556	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-51	SRS057791_LANL_scaffold_64973	+	798	887	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-52	Buccal_mucosa_LANL_scaffold_69102	+	103	192	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-53	SRS013705_Baylor_scaffold_48015	-	839	750	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-54	SRS015038_WUGC_scaffold_27606	-	597	508	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-55	SRS015272_WUGC_scaffold_163	+	206	295	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-56	SRS018357_C3855302	-	376	287	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-57	SRS019894_WUGC_scaffold_51429	+	155	244	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-58	SRS024081_LANL_scaffold_63456	-	645	556	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →

env-59	SRS053854.LANL_scaffold_54237	-	11790	11701	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-60	SRS057539.LANL_scaffold_53408	-	376	287	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-61	SRS064774.LANL_scaffold_7571	-	671	582	RNA → RpsM (COG0099)rpsM (PRK05179) → hypo → rps11 (CHL00041)PRK05309 (PRK05309) →
env-62	SRS015899.WUGC_scaffold_4042	-	330	246	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-63	SRS018975_C1798714	-	194	110	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-64	SRS064449.LANL_scaffold_25989	-	365	281	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-65	SRS019389_C2168600	-	376	311	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-66	SRS017808.Baylor_scaffold_37000	+	6883	6949	RNA →
env-67	SRS022530.LANL_scaffold_52023	+	955	1052	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-68	SRS013164.Baylor_scaffold_58877	+	45	110	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-69	SRS017209.Baylor_scaffold_57193	-	372	307	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-70	SRS053603.LANL_scaffold_21307	-	669	604	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-71	SRS019607.WUGC_scaffold_56406	-	626	561	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-72	SRS013502_C2176709	-	644	579	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-73	SRS013705.Baylor_scaffold_95676	+	104	169	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-74	SRS014684_C3315306	+	4413	4478	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-75	SRS015209.WUGC_scaffold_55827	-	1494	1429	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-76	SRS015434.WUGC_scaffold_26309	-	522	457	RNA → rps11 (CHL00041)PRK05309 (PRK05309)RpsM (COG0099)rpsM (PRK05179) →
env-77	SRS015762.WUGC_scaffold_32980	-	477	412	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-78	SRS015893.WUGC_scaffold_40459	+	3690	3755	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-79	SRS015941_C3324156	-	210	145	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-80	SRS016002_C2598934	+	157	222	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-81	SRS016037_C2049273	+	483	548	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-82	SRS016319.WUGC_scaffold_50629	+	485	550	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-83	SRS016569_C2462808	-	626	561	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-84	SRS018300.Baylor_scaffold_20150	-	420	355	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-85	SRS018357_C3909917	+	104	169	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-86	SRS019026_C1948435	+	142	207	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-87	SRS019027.WUGC_scaffold_19534	+	142	207	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-88	SRS019045.WUGC_scaffold_56945	-	150	85	RNA →
env-89	SRS019122_C5915383	+	2424	2489	RNA →
env-90	SRS019126_C2215224	+	4877	4942	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-91	SRS019127_C1662274	+	888	953	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-92	SRS019219_C2851913	+	104	169	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-93	SRS021496.Baylor_scaffold_36018	-	782	717	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-94	SRS022719.LANL_scaffold_70435	+	875	940	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-95	SRS023617.Baylor_scaffold_50101	+	369	434	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-96	SRS024138_C2767007	+	4689	4754	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-97	SRS024580.LANL_scaffold_8234	-	788	723	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-98	SRS045127.LANL_scaffold_37515	-	578	513	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-99	SRS049389.WUGC_scaffold_31108	+	747	812	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-100	SRS052227_C2920811	+	623	688	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-101	SRS055426_C3273637	-	680	615	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-102	SRS056622.LANL_scaffold_41405	+	1617	1682	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-103	SRS057205.LANL_scaffold_37743	-	1126	1061	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →

env-104	SRS058336.LANL_scaffold_63124	+	2680	2745	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-105	SRS062544.C2743506	-	183	118	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-106	SRS064423.LANL_scaffold_46316	+	11043	11108	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-107	SRS065278.LANL_scaffold_19746	+	11609	11674	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-108	SRS053917.LANL_scaffold_32361	+	1392	1457	RNA →
env-109	SRS020334.C2558817	+	142	207	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-110	SRS021477.Baylor_scaffold_19050	-	755	690	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-111	SRS022725.LANL_scaffold_49014	+	367	432	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-112	SRS044662.LANL_scaffold_17885	+	1141	1206	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-113	SRS050669.LANL_scaffold_31912	+	237	302	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → rpsD (PRK05327) → S4 (smart00363)RpsD (COG0522) → RpoA (COG0202)PRK05182 (PRK05182) →
env-114	SRS063603.LANL_scaffold_21218	+	1447	1512	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-115	SRS065310.LANL_scaffold_6764	+	673	738	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-116	SRS011306.Baylor_scaffold_86858	+	43	108	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-117	SRS018145.Baylor_scaffold_24537	-	588	523	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-118	SRS023926.C2758757	+	68	133	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-119	SRS024015.C2994174	+	50	115	RNA → RpsM (COG0099)uS13_bact (TIGR03631) →
env-120	SRS023964.Baylor_scaffold_21763	-	794	729	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
Lgo-2-1	NZ_KI911785.1	-	2023857	2023791	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Lgo-1-1	NZ_ADAD01000134.1	+	34253	34319	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → RplQ (COG0203)rplQ (PRK05591) →
env-121	SRS016043.C2119167	+	74	140	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-122	SRS016575.Baylor_scaffold_23962	-	369	303	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-123	SRS017445.Baylor_scaffold_6239	-	2604	2538	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-124	SRS019073.C2416263	-	249	183	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-125	SRS063932.C3692410	+	186	252	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-126	SRS022536.C4389246	-	210	144	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-127	SRS015057.WUGC_scaffold_17812	-	437	374	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-128	SRS022143.WUGC_scaffold_54212	-	269	206	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-129	SRS023352.LANL_scaffold_3112	-	145	82	RNA → hyp0 →
env-130	SRS045715.LANL_scaffold_13578	-	494	431	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-131	SRS019894.C3767991	-	146	38	RNA → hyp0 →
env-132	SRS017076.Baylor_scaffold_22004	-	540	432	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-133	SRS011140.Baylor_scaffold_53017	+	666	774	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-134	SRS017080.C1183285	+	157	265	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-135	SRS022530.LANL_scaffold_23336	+	1435	1543	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-136	SRS023352.LANL_scaffold_46408	-	540	432	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-137	SRS047210.WUGC_scaffold_54471	-	631	523	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-138	SRS056323.C2531100	+	190	298	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-139	SRS064774.LANL_scaffold_45162	-	363	255	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-140	SRS017808.C3851216	-	631	523	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-141	SRS016740.Baylor_scaffold_63596	-	601	493	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-142	SRS017209.Baylor_scaffold_58872	-	631	566	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-143	SRS015209.WUGC_scaffold_55797	+	3195	3260	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →

env-144	SRS015272_C3450279	-	233	168	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-145	SRS017120_Baylor_scaffold_63857	+	413	478	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-146	SRS018300_Baylor_scaffold_29179	-	540	475	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-147	SRS018591_WUGC_scaffold_4237	+	157	222	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-148	SRS044486_C2170011	-	316	251	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-149	SRS047824_WUGC_scaffold_43077	+	137	202	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-150	SRS053603_LANL_scaffold_76618	-	120	55	RNA →
env-151	SRS056622_LANL_scaffold_51943	-	691	626	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-152	SRS064329_LANL_scaffold_26192	-	540	475	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-153	SRS024081_LANL_scaffold_6310	-	649	584	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-154	SRS016086_C2470362	+	190	255	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-155	SRS018739_WUGC_scaffold_22546	+	1090	1155	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-156	SRS018791_C2157240	-	181	116	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-157	SRS020220_Baylor_scaffold_722	-	146	81	RNA → hypo →
env-158	SRS051791_C1815930	-	691	626	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-159	SRS013705_Baylor_scaffold_86091	-	631	566	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-160	SRS014271_WUGC_scaffold_1617	+	128	193	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-161	SRS023926_Baylor_scaffold_56329	+	157	222	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-162	SRS047219_WUGC_scaffold_31331	-	478	413	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-163	SRS065335_LANL_scaffold_24633	+	231	296	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-164	SRS019219_WUGC_scaffold_52621	-	783	718	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-165	SRS015893_WUGC_scaffold_14977	+	11585	11650	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-166	SRS024138_Baylor_scaffold_8471	+	1547	1612	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-167	SRS065278_LANL_scaffold_50816	-	540	475	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-168	SRS019607_C2720344	+	602	667	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-169	SRS064423_LANL_scaffold_7006	-	793	728	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-170	SRS050628_C1893763	+	408	473	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-171	SRS015278_WUGC_scaffold_6421	+	97	162	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-172	SRS024144_LANL_scaffold_20370	-	551	486	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-173	SRS055450_LANL_scaffold_40160	-	148	83	RNA → hypo →
Lwa-1-1	NZ_KB891061.1	+	14728	14793	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Lwa-2-1	NZ_KI271401.1	-	87815	87750	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-174	SRS022083_Baylor_scaffold_19178	-	217	152	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-175	SRS014690_C1889275	-	403	338	RNA → RpsM (COG0099)uS13_bact (TIGR03631) →
env-176	SRS017445_C3034105	+	35	100	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-177	SRS047113_LANL_scaffold_39994	+	35	100	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-178	SRS022536_LANL_scaffold_18564	-	468	403	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-179	SRS013723_Baylor_scaffold_46255	+	46	111	RNA → RpsM (COG0099)uS13_bact (TIGR03631) →
env-180	SRS016360_Baylor_scaffold_58948	-	577	512	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-181	SRS014476_C3328552	+	91	156	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-182	SRS015470_C3307239	+	122	187	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-183	SRS047265_C1024260	+	85	150	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-184	SRS065310_LANL_scaffold_16461	+	1324	1389	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-185	SRS053917_LANL_scaffold_85561	+	405	470	RNA → RpsM (COG0099)rpsM (PRK05179) →

env-186	SRS011343_Baylor_scaffold_32578	-	1439	1374	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
Lsp-3-1	NZ_KI272907.1	-	14521	14456	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-187	SRS014578_WUGC_scaffold_46133	+	84	149	RNA → hypo → RpsM (COG0099)rpsM (PRK05179) →
env-188	SRS021477_Baylor_scaffold_2106	-	788	723	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-189	SRS015044_WUGC_scaffold_24016	+	23	88	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-190	SRS063603_LANL_scaffold_95971	-	467	402	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-191	SRS055378_LANL_scaffold_65216	+	150	215	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-192	SRS052604_C1779911	-	369	304	RNA → RpsM (COG0099)rpsM (PRK05179) →
Lsp-4-1	NZ_KI271324.1	+	15601	15666	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-193	SRS016200_WUGC_scaffold_19120	-	324	259	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-194	SRS049318_LANL_scaffold_31958	-	260	195	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-195	SRS024447_LANL_scaffold_24021	+	353	418	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
Ltr-1-1	NZ_AXVL01000009.1	-	21488	21423	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Lsh-1-1	NZ_KB890273.1	-	105178	105113	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Lbu-1-1	NC_013192.1	+	2131217	2131282	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → hypo → hypo → Aes (COG0657) →
env-196	SRS018591_WUGC_scaffold_43849	+	45065	45132	HAMP (smart00304)HATPase_c (smart00387)HisKA (smart00388)BaeS (COG0642) → RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-197	SRS063999_LANL_scaffold_22653	-	339	274	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-198	SRS075404_LANL_scaffold_62603	-	150	85	RNA → hypo →
env-199	SRS014573_WUGC_scaffold_24913	+	104	169	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-200	SRS017120_C2908388	+	19	84	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-201	SRS017533_C4103099	-	869	804	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-202	SRS018439_Baylor_scaffold_46100	+	34	99	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-203	SRS018739_C3600550	+	123	188	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-204	SRS019327_WUGC_scaffold_19629	-	1708	1643	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-205	SRS022077_Baylor_scaffold_16023	-	575	510	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-206	SRS024081_LANL_scaffold_33076	+	104	169	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-207	SRS042131_WUGC_scaffold_3782	+	14639	14704	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-208	SRS042643_WUGC_scaffold_36196	+	924	989	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-209	SRS042910_C5617440	+	723	788	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-210	SRS043663_LANL_scaffold_40516	-	4450	4385	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-211	SRS044373_WUGC_scaffold_60101	-	526	461	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-212	SRS049268_LANL_scaffold_41923	-	669	604	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-213	SRS057022_LANL_scaffold_28937	+	206	271	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-214	SRS057539_LANL_scaffold_29275	+	3873	3938	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-215	SRS063193_LANL_scaffold_60270	-	626	561	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →

env-216	SRS064774_C2799284	+	104	169	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-217	SRS077736_C1759087	-	289	224	RNA → RpsM (COG0099)rpsM (PRK05179) →
Lsp-2-1	NZ_KI272826.1	+	100033	100098	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-218	SRS023835_C3783904	-	527	462	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-219	SRS055378_LANL_scaffold_20064	-	467	401	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-220	SRS016043_WUGC_scaffold_6899	+	458	524	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-221	SRS019591_WUGC_scaffold_33061	-	2209	2143	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-222	SRS013170_Baylor_scaffold_84939	-	535	469	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-223	SRS017139_Baylor_scaffold_75273	-	382	316	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-224	SRS023938_Baylor_scaffold_26910	-	1104	1038	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-225	SRS051930_C3131142	-	369	303	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-226	SRS023841_Baylor_scaffold_19242	+	7063	7129	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-227	SRS011098_Baylor_scaffold_14455	+	724	790	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-228	SRS012285_Baylor_scaffold_13798	+	101	167	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-229	SRS013533_PGA_scaffold_82441	-	660	594	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) →
env-230	SRS014578_WUGC_scaffold_68326	-	305	239	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-231	SRS015470_C3336101	-	669	603	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-232	SRS016575_C3616229	-	112	46	RNA → hypo →
env-233	SRS017511_C3312624	-	195	129	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-234	SRS018394_Baylor_scaffold_45763	+	120	186	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-235	SRS018665_WUGC_scaffold_479	-	1029	963	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → rpsD (PRK05327) →
env-236	SRS018975_C1710475	-	195	129	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-237	SRS022149_LANL_scaffold_16029	-	599	533	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-238	SRS024649_C3588658	-	373	307	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-239	SRS045197_C3310867	+	117	183	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-240	SRS051378_C1836081	+	393	459	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-241	SRS052604_C1775703	-	372	306	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-242	SRS055450_C2060497	+	104	170	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-243	SRS075410_LANL_scaffold_38102	-	535	469	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-244	SRS014476_C3276433	-	262	196	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-245	SRS015215_WUGC_scaffold_30194	-	2281	2215	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-246	SRS015899_C1863770	-	113	47	RNA → hypo →
env-247	SRS019073_C2423699	+	117	183	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-248	SRS019077_C2628206	+	123	189	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-249	SRS020226_Baylor_scaffold_50340	-	366	300	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-250	SRS024087_LANL_scaffold_39994	+	1637	1703	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-251	SRS024381_LANL_scaffold_49494	+	578	644	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-252	SRS047113_LANL_scaffold_2260	+	101	167	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-253	SRS051244_LANL_scaffold_43648	-	535	469	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-254	SRS051941_LANL_scaffold_55544	-	535	469	RNA → RpsM (COG0099)rpsM (PRK05179) →
Lsp-1-1	NZ_CP012410.1	+	259790	259856	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-255	SRS013723_Baylor_scaffold_66969	+	1803	1869	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →

env-256	JGI24712J26585_10001668	+	13781	13845	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-257	JGI24711J26586_10001349	+	13781	13845	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-258	JGI24502J29692_10003819	+	16692	16756	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-259	JGI24503J29689_10006856	+	15447	15511	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182)RNA_pol_A_CTD (pfam03118) → RplQ (COG0203)rplQ (PRK05591) →
Cso-1-1	NZ_KI518192.1	+	13030	13084	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Csp-2-1	NZ_JRJJZ01000165.1	+	13067	13121	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Csp-1-1	NZ_JTLI01000001.1	+	13083	13137	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-260	JGI994J12354_10000051	-	8355	8297	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-261	2227390564	-	241	183	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-262	IMNBL1_c0066592	+	328	386	RNA → RpsM (COG0099)rpsM (PRK05179) → rps11 (CHL00041)PRK05309 (PRK05309) →
env-263	BMHBC_159667	+	548	606	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
Ipo-1-1	NC_014632.1	-	1917483	1917425	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-264	contig93332	+	673	734	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-265	scaffold18717_1.V1.CD-11	+	1496	1557	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-266	DLF004_scaffold35352.1	+	13177	13238	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-267	DLM010_scaffold45172_1	-	4988	4927	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-268	DLM014_scaffold52950_1	+	13617	13678	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-269	DOM010_scaffold24129_1	+	9239	9300	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-270	DOM016_scaffold37026_2	-	10720	10659	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-271	DOM017_scaffold7272_3	-	2891	2830	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-272	NLF014_scaffold15038_1	+	529	590	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-273	NLF015_scaffold34189_4	-	5098	5037	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-274	NLM006_scaffold51268_3	-	727	666	RNA → RpsM (COG0099)rpsM (PRK05179) → rps11 (CHL00041)PRK05309 (PRK05309) →

env-275	NOM026_scaffold3_1	-	17438	17377	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-276	SRS017433_C1836359	-	3003	2942	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-277	SRS023176_C936722	-	3456	3395	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fmo-1-1	NZ_GL987993.1	+	62917	62978	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-278	NLM024_scaffold20695_1	-	5661	5600	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-279	NLM023_scaffold45840_1	-	36496	36435	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-280	DOM005_scaffold13463_2	-	25370	25308	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-281	DOM010_scaffold83_2	+	2172	2233	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-282	4448815.3_Contig41831	+	346	407	RNA →
env-283	DOM023_scaffold22784_3	-	323	262	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-284	NLM027_scaffold31130_3	-	5574	5513	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-285	NOM022_scaffold9197_2	-	8382	8321	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-286	NOM023_scaffold2804_1	+	2069	2130	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-287	4444165.3.11744	+	3036	3097	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-288	NOF009_scaffold43353_2	-	13425	13364	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-289	NLM017_scaffold13921_5	-	472	411	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-290	NOM004_scaffold18127_3	+	1020	1081	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-291	UnmappedStool_Broad_C252318921	-	272	211	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-292	DLF008_C336303_1	+	18232	18293	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-293	DOF006_scaffold7307_3	-	10364	10303	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-294	DOM005_scaffold6985_2	+	829	890	RNA → RpsM (COG0099)uS13_bact (TIGR03631) →
Ful-2-1	NZ_JH815234.1	+	58593	58654	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Ful-1-1	NZ_KE161010.1	+	184763	184824	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →

env-295	4491479.3_NODE.279	+	17428	17489	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-296	NOF002_scaffold13914.10	-	446	385	RNA → RpsM (COG0099)rpsM (PRK05179) →
Fva-1-1	NZ_GL987999.1	+	52065	52126	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-297	scaffold80362_1_V1.UC-17	+	2137	2199	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fsp-2-1	NZ_GG657975.1	-	48581	48519	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) → RplQ (COG0203)rplQ (PRK05591) →
Fgo-1-1	NZ_KQ235756.1	+	86258	86320	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fne-5-1	NZ_JAAF01000042.1	+	1430	1492	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fne-3-1	NZ_JAAC01000019.1	+	1569	1631	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fne-10-1	NZ_AOJP01000008.1	-	52376	52314	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fne-9-1	NZ_AJSY01000009.1	+	2132	2194	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fne-1-1	NZ_JAAE01000021.1	-	16569	16507	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fne-7-1	NZ_JAAH01000082.1	-	16650	16588	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fne-2-1	NZ_JAAG01000077.1	-	16625	16563	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fne-6-1	NZ_JAAD01000236.1	+	1428	1490	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fne-4-1	NZ_GL988017.1	+	49167	49229	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fne-11-1	NZ_ALKK01000035.1	-	50617	50555	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Fne-8-1	NZ_JHWT01000020.1	-	51252	51190	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-298	SRS043422_LANL_scaffold.508	-	307	245	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-299	SRS065099_LANL_scaffold.56436	+	892	954	RNA → RpsM (COG0099)rpsM (PRK05179) → rps11 (CHL00041)PRK05309 (PRK05309) →
env-300	SRS016360_Baylor_scaffold.43492	+	448	510	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) →
env-301	SRS021960_Baylor_scaffold.29549	-	372	310	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-302	SRS052876_LANL_scaffold.1775	+	450	512	RNA → rps13 (CHL00137)rpsM (PRK05179) →

env-303	SRS015985_WUGC_scaffold_11687	-	350	288	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-304	SRS020340_Baylor_scaffold_22156	-	1355	1293	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → S4 (smart00363)RpsD (COG0522) →
env-305	SRS017025_C1636822	+	100	162	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-306	SRS013170_Baylor_scaffold_81941	+	481	543	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-307	SRS017445_Baylor_scaffold_8312	+	454	516	RNA → RpsM (COG0099)rpsM (PRK05179) → rps11 (CHI00041)PRK05309 (PRK05309) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-308	SRS019073_WUGC_scaffold_286	+	20	82	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-309	SRS020226_Baylor_scaffold_20989	+	451	513	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-310	SRS047265_C1093350	+	348	410	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → rpsD (PRK05327) →
Fhw-4-1	NZ_ATKG01000094.1	-	9304	9242	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fhw-1-1	NZ_ATKE01000061.1	-	12226	12164	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fhw-3-1	NZ_ATKH01000028.1	-	9304	9242	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fhw-2-1	NZ_ATKF01000105.1	-	24308	24246	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fsp-6-1	NZ_JANA01000050.1	+	15841	15903	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-311	SRS018157_Baylor_scaffold_655	+	18	80	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-312	SRS057022_C1993424	-	642	580	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100)rps11p (PRK09607)arch_S11P (TIGR03628)uS11_bact (TIGR03632)Ribosomal
Fnu-9-1	NZ_ALVD01000005.1	+	72312	72374	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-313	SRS015470_WUGC_scaffold_62148	-	625	563	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309) →
env-314	SRS063351_C704759	-	376	314	RNA → RpsM (COG0099)rpsM (PRK05179) →
Fnu-3-1	NZ_KI1518461.1	-	1355250	1355188	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fnu-16-1	NZ_ATKD01000080.1	-	9661	9599	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fsp-3-1	NZ_JANB01000001.1	+	5756	5818	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fnu-10-1	NZ_AXUR01000028.1	-	25993	25931	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-315	SRS051930_LANL_scaffold_6191	+	3750	3812	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → S4 (smart00363)RpsD (COG0522) → RpoA (COG0202)rpoA (TIGR02027) →
env-316	SRS016541_C1528741	+	21	83	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-317	SRS011126_Baylor_scaffold_58649	-	598	536	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-318	SRS050628_C1835320	-	390	328	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-319	SRS012285_Baylor_scaffold_1782	+	425	487	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-320	SRS017691_Baylor_scaffold_50060	+	518	580	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-321	SRS018443_C3801805	+	470	532	RNA →
env-322	SRS014578_WUGC_scaffold_7353	-	722	660	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-323	SRS014690_C1866550	-	347	285	RNA → RpsM (COG0099)rpsM (PRK05179) →

env-324	SRS015278.WUGC_scaffold_42089	+	2204	2266	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-325	SRS015989.C2166928	+	538	600	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-326	SRS016043.WUGC_scaffold_19941	-	541	479	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-327	SRS023358.C3483802	-	630	568	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309) →
env-328	SRS023938.Baylor_scaffold_16323	+	244	306	RNA → RpsM (COG0099)rpsM (PRK05179) → rps11 (CHL00041)PRK05309 (PRK05309) →
env-329	SRS024021.C2019934	-	499	437	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-330	SRS024381.LANL_scaffold_17523	+	558	620	RNA → RpsM (COG0099)rpsM (PRK05179) → rps11 (CHL00041)PRK05309 (PRK05309) →
env-331	SRS051378.C1822879	+	210	272	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-332	SRS052604.C1807758	+	212	274	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-333	SRS056892.C1486315	+	188	250	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-334	SRS058808.LANL_scaffold_23314	+	321	383	RNA → RpsM (COG0099)rpsM (PRK05179) →
Fnu-1-1	NZ_KI965381.1	-	1470032	1469970	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fnu-7-1	NZ_AXNV01000011.1	+	20769	20831	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fsp-5-1	NZ_JAQC01000039.1	+	6874	6936	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-335	SRS055378.LANL_scaffold_3069	+	20	84	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-336	SRS014476.C3341139	+	43	105	RNA → RpsM (COG0099)rpsM (PRK05179) →
Fnu-22-1	NZ_CM000440.1	+	860522	860584	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) → RplQ (COG0203)rplQ (PRK05591) →
env-337	SRS064329.LANL_scaffold_32934	+	20	82	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100)rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-338	Throat_LANL_C5780661	-	163	101	RNA →
env-339	SRS014684.WUGC_scaffold_2752	+	1181	1243	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-340	SRS018591.C1305506	-	1175	1113	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-341	SRS019022.WUGC_scaffold_38441	-	3789	3727	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-342	SRS019045.WUGC_scaffold_36434	-	9682	9620	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-343	SRS019219.WUGC_scaffold_39593	-	1300	1238	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-344	SRS019389.C2241031	-	648	586	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-345	SRS020220.C3612140	-	287	225	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-346	SRS051791.LANL_scaffold_1205	-	1302	1240	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-347	SRS053603.C3303360	+	458	520	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-348	SRS054687.C3486456	-	734	672	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-349	SRS065335.LANL_scaffold_29301	-	3749	3687	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →

env-350	SRS017120_Baylor_scaffold.81370	+	457	519	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-351	SRS014692_WUGC_scaffold.12525	-	1378	1316	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → S4 (smart00363)RpsD (COG0522) →
env-352	SRS047824_WUGC_scaffold.34774	-	578	516	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-353	SRS023930_C2177563	-	496	434	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-354	SRS018665_WUGC_scaffold.5673	-	903	841	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-355	SRS018975_WUGC_scaffold.48555	-	578	516	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-356	SRS020858_C751293	-	163	101	RNA → hypo →
env-357	SRS023987_C1155340	-	165	103	RNA → hypo →
env-358	SRS052668_LANL_scaffold.2440	+	371	433	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-359	SRS011086_C2705778	+	490	552	RNA →
env-360	SRS018971_C747146	+	209	271	RNA →
env-361	SRS019128_WUGC_scaffold.1597	-	240	178	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-362	SRS023595_Baylor_scaffold.12376	+	20	82	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
Fsp-7-1	NZ_JH378968.1	-	23656	23594	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-363	SRS016740_Baylor_scaffold.31792	-	2409	2347	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-364	SRS055495_C1108972	-	120	58	RNA →
env-365	SRS062878_LANL_scaffold.63865	+	495	557	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-366	SRS075404_LANL_scaffold.14797	+	890	828	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-367	SRS011140_Baylor_scaffold.51504	+	350	412	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-368	SRS011243_Baylor_scaffold.10689	-	3419	3357	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-369	SRS011247_C1351757	+	468	530	RNA →
env-370	SRS011306_Baylor_scaffold.3104	-	3003	2941	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-371	SRS013164_Baylor_scaffold.46971	-	920	858	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-372	SRS013502_C2191535	-	163	101	RNA →
env-373	SRS013705_Baylor_scaffold.64513	+	487	549	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-374	SRS013818_Baylor_scaffold.41472	+	473	535	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) →
env-375	SRS013879_WUGC_scaffold.41089	-	934	872	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-376	SRS013945_WUGC_scaffold.13633	-	525	463	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-377	SRS013947_WUGC_scaffold.13273	-	7521	7459	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-378	SRS013948_C1529892	+	458	520	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-379	SRS014124_WUGC_scaffold.58834	-	1359	1297	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → S4 (smart00363)RpsD (COG0522) →
env-380	SRS014271_WUGC_scaffold.4413	+	497	559	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → hypo →
env-381	SRS014470_WUGC_scaffold.38766	-	2083	2021	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-382	SRS014573_WUGC_scaffold.16390	-	844	782	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → PRK05309 (PRK05309)RpsK (COG0100) →
env-383	SRS014689_WUGC_scaffold.25280	+	2043	2105	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →

env-384	SRS014888_WUGC_scaffold_2290	+	801	863	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-385	SRS015057_WUGC_scaffold_68354	-	734	672	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-386	SRS015154_C747837	+	666	728	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-387	SRS015644_WUGC_scaffold_11157	+	577	639	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → hypo →
env-388	SRS015745_C1206036	-	637	575	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-389	SRS015762_C3450973	-	163	101	RNA → hypo →
env-390	SRS015797_WUGC_scaffold_30177	-	734	672	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-391	SRS015893_WUGC_scaffold_5057	+	854	916	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-392	SRS015941_WUGC_scaffold_78015	-	1690	1628	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → hypo →
env-393	SRS016002_WUGC_scaffold_50772	-	2403	2341	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-394	SRS016037_WUGC_scaffold_2228	-	3491	3429	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) → RNA_pol_A_CTD (pfam03118)HHH_5 (pfam14520) →
env-395	SRS016086_C2496538	-	737	675	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-396	SRS016225_WUGC_scaffold_27311	-	2971	2909	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-397	SRS016319_WUGC_scaffold_10490	+	864	926	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-398	SRS016569_Baylor_scaffold_43023	-	332	270	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-399	SRS017209_Baylor_scaffold_12537	+	765	827	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-400	SRS017215_Baylor_scaffold_8618	+	162	224	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-401	SRS017439_Baylor_scaffold_16569	-	2843	2781	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-402	SRS017533_Baylor_scaffold_4653	+	366	428	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-403	SRS017808_Baylor_scaffold_22336	-	2749	2687	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-404	SRS018149_Baylor_scaffold_14890	+	287	349	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-405	SRS018357_Baylor_scaffold_12839	+	1146	1208	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-406	SRS018739_WUGC_scaffold_20843	+	819	881	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → S4 (smart00363)RpsD (COG0522) →
env-407	SRS018969_C2947476	-	741	679	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-408	SRS019026_WUGC_scaffold_24792	-	723	661	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-409	SRS019122_WUGC_scaffold_7425	-	151	89	RNA → hypo →
env-410	SRS019126_WUGC_scaffold_31303	+	1131	1193	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-411	SRS019127_WUGC_scaffold_14132	+	458	520	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → hypo →
env-412	SRS019327_WUGC_scaffold_41934	+	485	547	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-413	SRS019587_C1052430	+	490	552	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-414	SRS019607_WUGC_scaffold_24021	-	1359	1297	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → S4 (smart00363)RpsD (COG0522) →
env-415	SRS019894_C3929909	+	2203	2265	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-416	SRS019974_Baylor_scaffold_593	-	1777	1715	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →

env-417	SRS020856_Baylor_scaffold_33762	-	2739	2677	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-418	SRS021496_Baylor_scaffold_62694	-	926	864	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-419	SRS021954_C3037904	-	734	672	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-420	SRS022143_WUGC_scaffold_83705	-	996	934	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-421	SRS022530_LANL_scaffold_49521	-	926	864	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-422	SRS022621_Baylor_scaffold_80815	+	486	548	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-423	SRS023352_LANL_scaffold_56800	-	3748	3686	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-424	SRS023835_Baylor_scaffold_7147	+	1830	1892	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-425	SRS023926_Baylor_scaffold_58416	+	523	585	RNA →
env-426	SRS023958_Baylor_scaffold_28668	+	1028	1090	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-427	SRS024015_Baylor_scaffold_50485	+	758	820	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-428	SRS024138_Baylor_scaffold_11348	+	624	686	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → rpsD (PRK05327)Ribosomal_S4 (pfam00163) →
env-429	SRS024277_LANL_scaffold_17092	-	1783	1721	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-430	SRS024375_LANL_scaffold_43939	+	472	534	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-431	SRS024441_LANL_scaffold_45032	+	350	412	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-432	SRS042131_WUGC_scaffold_44855	-	11940	11878	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-433	SRS042910_WUGC_scaffold_4026	-	142	80	RNA →
env-434	SRS043663_LANL_scaffold_25082	+	1266	1328	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) →
env-435	SRS044373_C2894119	-	163	101	RNA →
env-436	SRS044662_LANL_scaffold_30324	+	1063	1125	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-437	SRS045127_LANL_scaffold_33107	-	934	872	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-438	SRS045978_C998448	+	162	224	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-439	SRS047210_WUGC_scaffold_50675	+	485	547	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-440	SRS047219_C2250559	+	513	575	RNA →
env-441	SRS048411_C6948333	-	287	225	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-442	SRS048791_LANL_scaffold_14386	-	1359	1297	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → S4 (smart00363)RpsD (COG0522) →
env-443	SRS049147_LANL_scaffold_32903	+	345	407	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-444	SRS049389_C4447558	-	165	103	RNA → hyp0 →
env-445	SRS050029_C712147	-	1341	1279	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → S4 (smart00363)RpsD (COG0522) →
env-446	SRS052227_LANL_scaffold_45775	+	496	558	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → S4 (smart00363)RpsD (COG0522) →
env-447	SRS052874_LANL_scaffold_15177	-	214	152	RNA → rps13 (CHL00137)rpsM (PRK05179) →
env-448	SRS053854_LANL_scaffold_52950	-	165	103	RNA →
env-449	SRS054569_C1459708	+	270	332	RNA →
env-450	SRS055426_LANL_scaffold_39788	-	367	305	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-451	SRS056323_C2439953	-	144	82	RNA → hyp0 →
env-452	SRS057205_LANL_scaffold_18775	-	538	476	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →

env-453	SRS057355_LANL_scaffold_42476	+	233	295	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-454	SRS057692_LANL_scaffold_15429	-	850	788	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-455	SRS057791_C3662634	+	525	587	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-456	SRS058336_LANL_scaffold_23007	+	495	557	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-457	SRS062544_LANL_scaffold_18883	+	811	873	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-458	SRS063193_LANL_scaffold_13819	+	549	611	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-459	SRS063288_LANL_scaffold_60004	-	1777	1715	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → PRK05182 (PRK05182)RNA_pol_L (pfam01193) →
env-460	SRS064423_LANL_scaffold_34417	+	577	639	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-461	SRS064774_LANL_scaffold_4377	+	577	639	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-462	SRS065278_LANL_scaffold_17949	-	734	672	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →
env-463	SRS077736_LANL_scaffold_5525	+	6802	6864	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fsp-1-1	NZ_GG770381.1	+	968393	968455	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) → RplQ (COG0203)rplQ (PRK05591) →
Fpe-4-1	NZ_JH815417.1	-	11807	11745	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fpe-2-1	NZ_KN173677.1	-	26799	26737	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fpe-3-1	NZ_GG665896.1	-	54181	54119	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) → RplQ (COG0203)rplQ (PRK05591) →
Fnu-13-1	NZ_KI391961.1	-	1115280	1115218	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-464	SRS014107_C1350717	-	463	401	RNA → RpsM (COG0099)rpsM (PRK05179) →
Fnu-20-1	NC_003454.1	-	1944307	1944245	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fnu-19-1	NZ_ADVK01000050.1	+	10509	10571	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) → RplQ (COG0203)rplQ (PRK05591) →
Fnu-4-1	NZ_KI518439.1	-	69791	69729	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
Fnu-21-1	NZ_ATKC01000049.1	+	44411	44473	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-465	SRS023538_C1261540	+	17	79	RNA → RpsM (COG0099)rpsM (PRK05179) →

env-466	SRS024355_LANL_scaffold_106543	+	483	545	RNA→
env-467	SRS014477_C1639124	-	1216	1154	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ rpsD (PRK05327)Ribosomal_S4 (pfam00163)→
env-468	SRS015062_WUGC_scaffold_604	+	27	89	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→
Fnu-27-1	NZ_AABF02000152.1	-	665	603	RNA→ RpsM (COG0099)rpsM (PRK05179)→ RpsM (COG0099)rpsM (PRK05179)→
Fnu-18-1	NZ_AKXI01000109.1	-	659	597	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ PRK05309 (PRK05309)RpsK (COG0100)→
Fnu-8-1	NZ_KI518350.1	-	29268	29206	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→ RplQ (COG0203)rplQ (PRK05591)→
Fsp-4-1	NZ_AZYU01000357.1	+	163603	163665	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→ RplQ (COG0203)rplQ (PRK05591)→
Fnu-14-1	NC_021281.1	+	757767	757829	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→
Fnu-11-1	NZ_GL945391.1	-	1036500	1036438	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→ RplQ (COG0203)rplQ (PRK05591)→
Fnu-17-1	NZ_JH594451.1	-	821484	821422	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→
Fnu-5-1	NZ_KI518408.1	-	1034316	1034254	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→
Fnu-6-1	NZ_KI518379.1	-	4358	4296	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→
Fnu-15-1	NZ_CP007062.1	-	1460036	1459974	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→
Fnu-12-1	NZ_CM002368.1	-	1637804	1637742	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→
Fnu-23-1	NZ_ADDB02000001.1	-	1457971	1457909	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→
env-469	SRS011255_Baylor_scaffold_49939	-	316	254	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-470	SRS017304_C1979295	-	442	380	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-471	SRS024289_LANL_scaffold_19647	-	348	286	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-472	SRS017076_C2692026	+	484	546	RNA→ RpsM (COG0099)rpsM (PRK05179)→
env-473	SRS015061_WUGC_scaffold_2363	+	922	984	RNA→
env-474	SRS063603_LANL_scaffold_101633	+	89	151	RNA→ RpsM (COG0099)rpsM (PRK05179)→ rps11 (CHL00041)PRK05309 (PRK05309)→
Fnu-25-1	NC_022196.1	-	1518281	1518219	RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→
Fnu-24-1	NZ_CP007064.1	+	716475	716537	RplQ (COG0203)rplQ (PRK05591)→ RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→
Fnu-26-1	NZ_KQ235737.1	+	623579	623641	RplQ (COG0203)rplQ (PRK05591)→ RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→
Fnu-2-1	NZ_AOUL01000031.1	+	497	559	RplQ (COG0203)rplQ (PRK05591)→ RNA→ RpsM (COG0099)rpsM (PRK05179)→ PRK05309 (PRK05309)RpsK (COG0100)→ RpsD (COG0522)rpsD (PRK05327)→ RpoA (COG0202)rpoA (TIGR02027)→
					RplQ (COG0203)rplQ (PRK05591)→

Fnu-28-1	NZ_ATKB01000107.1	+	34703	34765	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)rpoA (TIGR02027) → RplQ (COG0203)rplQ (PRK05591) →
env-475	SRS013946_WUGC_scaffold_10067	-	3701	3639	RNA → RpsM (COG0099)rpsM (PRK05179) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-476	SRS014473_C1106123	-	312	250	RNA → RpsM (COG0099)rpsM (PRK05179) →
Fru-1-1	NZ_KB906917.1	+	50468	50530	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
Pat-1-1	NZ_AUFS01000005.1	+	43017	43092	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-477	ASRL01000232.1	+	4597	4673	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → RplQ (COG0203)rplQ (PRK05591) →
env-478	ASRO01002109.1	-	745	669	RNA → RpsM (COG0099)rpsM (PRK05179) → rps11 (CHL00041)PRK05309 (PRK05309) →
env-479	ASRP01009088.1	-	232	156	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-480	AYRG01000382.1	-	2353	2277	RNA → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RNAP_alpha_NTD (cd06928)PRK05182 (PRK05182) →
env-481	ASRM01008875.1	-	376	300	RNA → RpsM (COG0099)rpsM (PRK05179) →
env-482	KGL_S1_ANT01.95m.c10046776	+	726	802	RNA → RpsM (COG0099)rpsM (PRK05179) → rps11 (CHL00041)PRK05309 (PRK05309) →

17.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 17.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one S4-

Fusobacteriales RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 17.2.

cd06928 (15) N-terminal domain of the Alpha subunit of Bacterial RNA polymerase.
cd16320 (1) N-terminal subdomain of transcriptional regulator MraZ.
cd16321 (1) C-terminal subdomain of transcriptional regulator MraZ.
CHL00041 (11) ribosomal protein S11
CHL00137 (11) ribosomal protein S13; Validated
COG0099 (522) Ribosomal protein S13 [Translation, ribosomal structure and biogenesis]
COG0100 (308) Ribosomal protein S11 [Translation, ribosomal structure and biogenesis]
COG0202 (175) DNA-directed RNA polymerase, alpha subunit/40 kD subunit [Transcription]
COG0203 (145) Ribosomal protein L17 [Translation, ribosomal structure and biogenesis]
COG0275 (1) 16S rRNA C1402 N4-methylase RsmH [Translation, ribosomal structure and biogenesis]
COG0522 (199) Ribosomal protein S4 or related protein [Translation, ribosomal structure and biogenesis]
COG0642 (1) Signal transduction histidine kinase [Signal transduction mechanisms]
COG0657 (1) Acetyl esterase/lipase [Lipid transport and metabolism]
pfam00163 (9) Ribosomal protein S4/S9 N-terminal domain.
pfam00411 (1) Ribosomal protein S11.
pfam00583 (3) Acetyltransferase (GNAT) family.
pfam01193 (7) RNA polymerase Rpb3/Rpb11 dimerisation domain.
pfam01196 (7) Ribosomal protein L17.
pfam03118 (2) Bacterial RNA polymerase, alpha chain C terminal domain.
pfam13508 (3) Acetyltransferase (GNAT) domain.
pfam14520 (1) Helix-hairpin-helix domain.

PRK00050 (1) 16S rRNA m(4)C1402 methyltransferase; Provisional
PRK00326 (1) cell division protein MraZ; Reviewed
PRK05179 (528) 30S ribosomal protein S13; Validated
PRK05182 (110) DNA-directed RNA polymerase subunit alpha; Provisional
PRK05309 (321) 30S ribosomal protein S11; Validated
PRK05327 (201) 30S ribosomal protein S4; Validated
PRK05591 (152) 50S ribosomal protein L17; Validated
PRK09607 (1) 30S ribosomal protein S11P; Reviewed
smart00304 (1) HAMP (Histidine kinases, Adenylyl cyclases, Methyl binding proteins, Phosphatases) domain.
smart00363 (11) S4 RNA-binding domain.
smart00387 (1) Histidine kinase-like ATPases.
smart00388 (1) His Kinase A (phosphoacceptor) domain.
TIGR02027 (87) DNA-directed RNA polymerase, alpha subunit, bacterial and chloroplast-type. [Transcription, DNA-dependent RNA polymerase]
TIGR03628 (1) ribosomal protein uS11P, archaeal form. [Protein synthesis, Ribosomal proteins: synthesis and modification]
TIGR03631 (5) ribosomal protein uS13, bacterial form. [Protein synthesis, Ribosomal proteins: synthesis and modification]
TIGR03632 (1) ribosomal protein uS11, bacterial form. [Protein synthesis, Ribosomal proteins: synthesis and modification]

abbrev.	Seq. accession		5' at	3' at	genes
env-1	F3OLC3J01EL6Z5	-	180	92	RNA → hypo →
env-2	F3OLC3J02I9N18	+	405	486	RNA → hypo →
env-3	F3OLC3J01B4FHU	-	100	16	RNA → ← hypo
Cli-1-1	NC_010803.1	+	167079	167163	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
env-4	F3OLC3J01AOTFF	+	81	168	RNA → hypo → hypo →
env-5	F3OLC3J01ER1WJ	+	100	184	RNA → rpsF (PRK00453) Ribosomal_S6 (pfam01250) →
env-6	F3OLC3J02FQPPB	+	240	324	RNA → hypo →
env-7	F3OLC3J02HKSSD	+	197	281	RNA → hypo →
env-8	F3OLC3J01EFF4C	+	240	324	RNA →
env-9	TB_FS08_3DRAFT_1000662	-	15648	15564	RNA → rpsF (PRK00453) Ribosomal_S6 (pfam01250) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
env-10	F3OLC3J01EZCCM	+	89	173	RNA → rpsF (PRK00453) Ribosomal_S6 (pfam01250) →
env-11	F3OLC3J01BGKJE	+	100	184	RNA → rpsF (PRK00453) Ribosomal_S6 (pfam01250) →
env-12	F3OLC3J01BIBU0	-	124	40	RNA → hypo →
env-13	F3OLC3J01B90M6	+	80	164	RNA → rpsF (PRK00453) Ribosomal_S6 (pfam01250) →
env-14	F3OLC3J01CB09B	+	308	390	RNA → hypo →
Cch-1-1	NC_007514.1	+	109831	109904	RNA → rpsF (PRK00453) Ribosomal_S6 (pfam01250) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
Cph-1-1	NC_010831.1	+	160217	160291	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
env-15	M750CN_1000441	-	2463	2386	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
env-16	M740_1006987	-	2342	2265	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
Pae-1-1	NC_011059.1	+	168156	168233	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
env-17	M590M2_1034735	-	176	99	RNA → hypo →
env-18	M590M1_1003288	+	1442	1517	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
env-19	M590M2_1009672	-	1755	1680	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
env-20	GooDraft_1000020	-	11816	11741	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
env-21	M740_1012895	-	3033	2959	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
env-22	M750CN_1002294	+	1537	1611	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
Cpa-1-1	NC_011027.1	+	129607	129681	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
env-23	M590M1_1000641	-	1709	1635	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
env-24	M590M2_1003423	-	1681	1607	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (PRK00137) Ribosomal_L9_N (pfam01281) →
Cte-1-1	NC_002932.3	-	2020240	2020165	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) →
Cph-2-1	NC_008639.1	-	2877490	2877409	RNA → rpsF (PRK00453) bS6 (cd00473) → ssb (TIGR00621) SSB (pfam00436) → rpsR (PRK00391) Ribosomal_S18 (pfam01084) → RplI (COG0359) rplI (PRK00137) →
env-25	NCBI_READ_1113216244664	-	966	897	RNA → rpsF (PRK00453) Ribosomal_S6 (pfam01250) → SSB_OBF (cd04496) ssb (TIGR00621) →
env-26	NCBI_READ_1113298190517	-	98	23	RNA →
env-27	NCBI_READ_1113316091948	+	650	726	RNA →
env-28	NCBI_READ_1113316246897	+	712	788	RNA →
env-29	NCBI_READ_1112280131988	+	738	813	RNA → heptsyl_trn_II (TIGR02195) GT1_LPS_heptsyltransferase (cd03789) →
env-30	NCBI_READ_1113316182926	+	890	964	RNA →
env-31	NCBI_READ_1112280190525	+	291	367	RNA → rpsF (PRK00453) bS6 (cd00473) →
env-32	NCBI_READ_1113235400465	-	346	270	RNA → rpsF (PRK00453) Ribosomal_S6 (pfam01250) →

env-33	NCBI_READ_1112280138898	-	302	226	RNA → rpsF (PRK00453)Ribosomal_S6 (pfam01250) →
env-34	NCBI_READ_1113315684505	-	349	273	RNA → rpsF (PRK00453)Ribosomal_S6 (pfam01250) →
env-35	NCBI_READ_1112280178452	-	455	379	RNA → rpsF (PRK00453)bS6 (cd00473) →
env-36	NCBI_READ_1113298125219	-	372	296	RNA → rpsF (PRK00453)Ribosomal_S6 (pfam01250) →
env-37	NCBI_READ_1113316249537	+	181	257	RNA → rpsF (PRK00453)bS6 (cd00473) →
env-38	NCBI_READ_1113316395352	-	471	395	RNA → rpsF (PRK00453)bS6 (cd00473) →
env-39	NCBI_READ_1113308556153	-	520	444	RNA → rpsF (PRK00453)bS6 (cd00473) →
env-40	NCBI_READ_1113316249529	-	226	150	RNA → rpsF (PRK00453) →
env-41	NCBI_READ_1113215706340	+	274	350	RNA → rpsF (PRK00453)Ribosomal_S6 (pfam01250) →
env-42	NCBI_READ_1113315555704	-	506	430	RNA → rpsF (PRK00453)bS6 (cd00473) →
env-43	NCBI_READ_1113316238233	-	471	395	RNA → rpsF (PRK00453)bS6 (cd00473) →
env-44	NCBI_READ_1113216208246	-	506	430	RNA → rpsF (PRK00453)bS6 (cd00473) →
env-45	NCBI_READ_1113316081654	-	811	735	RNA → rpsF (PRK00453)bS6 (cd00473) → SSB_OBF (cd04496)ssb (TIGR00621) →
env-46	NCBI_READ_1113021287689	-	859	784	RNA → rpsF (PRK00453)bS6 (cd00473) →
env-47	NCBI_READ_1113289126331	-	828	752	RNA → rpsF (PRK00453)bS6 (cd00473) → Ssb (COG0629)ssb (TIGR00621) →
env-48	NCBI_READ_1113215581360	-	190	114	RNA →
env-49	NCBI_READ_1113235389909	-	644	568	RNA → rpsF (PRK00453)bS6 (cd00473) →
Cph-3-1	NC_009337.1	+	202059	202135	RNA → rpsF (PRK00453)Ribosomal_S6 (pfam01250) → SSB_OBF (cd04496)ssb (TIGR00621) → rpsR (PRK00391)Ribosomal_S18 (pfam01084) → RplI (COG0359)rplI (PRK00137) →
env-50	NCBI_READ_1112308883715	-	917	846	RNA → rpsF (PRK00453)bS6 (cd00473) → SSB_OBF (cd04496)ssb (TIGR00621) →
env-51	NCBI_READ_1112280218812	-	990	917	RNA → rpsF (PRK00453)Ribosomal_S6 (pfam01250) → SSB_OBF (cd04496)ssb (TIGR00621) →
env-52	NCBI_READ_1113316170875	-	893	819	RNA → rpsF (PRK00453)bS6 (cd00473) →
env-53	TB_FS08.3DRAFT_1000257	+	16727	16803	RNA → rpsF (PRK00453)bS6 (cd00473) → ssb (TIGR00621)SSB (pfam00436) → rpsR (PRK00391)Ribosomal_S18 (pfam01084) → RplI (COG0359)rplI (PRK00137) →
Cfe-1-1	NZ_AA01000042.1	-	4661	4585	RNA → rpsF (PRK00453)bS6 (cd00473) → rpsF (PRK00453)bS6 (cd00473) → ssb (TIGR00621)SSB (pfam00436) → ssb (TIGR00621)SSB (pfam00436) → rpsR (PRK00391)Ribosomal_S18 (pfam01084) → rpsR (PRK00391)Ribosomal_S18 (pfam01084) → RplI (COG0359)rplI (PRK00137) → RplI (COG0359)rplI (PRK00137) →
Pph-1-1	NC_011060.1	+	122430	122507	RNA → rpsF (PRK00453)bS6 (cd00473) → ssb (TIGR00621)SSB (pfam00436) → rpsR (PRK00391)Ribosomal_S18 (pfam01084) → RplI (COG0359)rplI (PRK00137) →
env-54	TB03JUN2009H_c1	+	2274	2351	RNA → rpsF (PRK00453)bS6 (cd00473) → ssb (TIGR00621)SSB (pfam00436) → rpsR (PRK00391)Ribosomal_S18 (pfam01084) → RplI (COG0359)rplI (PRK00137) →
env-55	TB18AUG2009E_c1	+	2274	2351	RNA → rpsF (PRK00453)bS6 (cd00473) → ssb (TIGR00621)SSB (pfam00436) → rpsR (PRK00391)Ribosomal_S18 (pfam01084) → RplI (COG0359)rplI (PRK00137) →
env-56	TB18AUG2009H_c2	+	2274	2351	RNA → rpsF (PRK00453)bS6 (cd00473) → ssb (TIGR00621)SSB (pfam00436) → rpsR (PRK00391)Ribosomal_S18 (pfam01084) → RplI (COG0359)rplI (PRK00137) →
Clu-1-1	NC_007512.1	+	128893	128969	RNA → rpsF (PRK00453)Ribosomal_S6 (pfam01250) → ssb (TIGR00621)SSB (pfam00436) → rpsR (PRK00391)Ribosomal_S18 (pfam01084) → RplI (COG0359)rplI (PRK00137) →

18.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 18.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one S6-S18-

cd00473 (36) Bacterial ribosomal protein S6.

cd03789 (1) Lipopolysaccharide heptosyltransferase is involved in the biosynthesis of lipooligosaccharide (LOS).

cd04496 (5) SSB_OBF: A subfamily of OB folds similar to the OB fold of ssDNA-binding protein (SSB).

COG0359 (24) Ribosomal protein L9 [Translation, ribosomal structure and biogenesis]

Chlorobi RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 18.2.

COG0629 (1) Single-stranded DNA-binding protein [Replication, recombination and repair]

pfam00436 (25) Single-strand binding protein family.

pfam01084 (25) Ribosomal protein S18.

pfam01250 (15) Ribosomal protein S6.

pfam01281 (1) Ribosomal protein L9, N-terminal domain.

PRK00137 (25) 50S ribosomal protein L9; Reviewed

The taxonomy of each organism containing a putative S10-Clostridia RNA is listed, with abbreviations identifying each hit (e.g., “Eco-1-1” and “Eco-1-2” might hypothetically represent two distinct RNAs in *E. coli*). The abbreviations will be used to identify each individual S10-Clostridia RNA in Sections 19.2 and 19.4.

abbrev. of hits	taxonomy of species
Bhy-1-1	Bacteria Firmicutes Clostridia Clostridiales <i>Blautia hydrogenotrophica</i> DSM 10507 (Ruminococcus)
Cba-1-1	Bacteria Firmicutes Clostridia Clostridiales <i>Clostridiaceae bacterium</i> MS3
Cbo-1-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium bolteae</i> 90A5
Cbo-2-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium bolteae</i> 90A9
Cbo-3-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium bolteae</i> 90B3
Cbo-4-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium bolteae</i> 90B7
Cbo-5-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium bolteae</i> 90B8
Cbo-6-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium bolteae</i> ATCC BAA-613
Cci-1-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium citroniae</i> WAL-17108
Ccl-1-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium clostridioforme</i> 2_1_49FAA
Ccl-2-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium clostridioforme</i> 90A1
Ccl-3-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium clostridioforme</i> 90A3
Ccl-4-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium clostridioforme</i> 90A4
Ccl-5-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium clostridioforme</i> 90A6
Ccl-6-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium clostridioforme</i> 90A7
Ccl-7-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium clostridioforme</i> 90A8
Ccl-8-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium clostridioforme</i> 90B1
Ccl-9-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium clostridioforme</i> CM201
Cha-1-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium hathewayi</i> 12489931
Cha-2-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium hathewayi</i> WAL-18680
Cne-1-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium nexile</i> DSM 1787
Cph-1-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium phytofermentans</i> ISDg
Csa-1-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium saccharolyticum</i> WMI
Csc-1-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium scindens</i> ATCC 35704
Csp-1-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium</i> sp. 7_3_54FAA
Csp-2-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium</i> sp. ASF356
Csp-3-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium</i> sp. ASF502
Csp-4-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium</i> sp. D5
Csp-5-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium</i> sp. FS41
Csp-6-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium</i> sp. L2-50
Csp-7-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium</i> sp. M62/1
Csy-1-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium symbiosum</i> ATCC 14940
Csy-2-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium symbiosum</i> WAL-14163
Csy-3-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Clostridium symbiosum</i> WAL-14673
Hha-1-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Hungatella hathewayi</i> VE202-04
Hha-2-1	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae <i>Hungatella hathewayi</i> VE202-11
Cba-2-1	Bacteria Firmicutes Clostridia <i>Clostridiales bacterium</i> 1_7_47FAA
Cba-3-1	Bacteria Firmicutes Clostridia <i>Clostridiales bacterium</i> OBRC5-5
Cba-4-1	Bacteria Firmicutes Clostridia <i>Clostridiales bacterium</i> VE202-07
Cba-5-1	Bacteria Firmicutes Clostridia <i>Clostridiales bacterium</i> VE202-16
Cba-6-1	Bacteria Firmicutes Clostridia <i>Clostridiales bacterium</i> VE202-26
Cba-7-1	Bacteria Firmicutes Clostridia <i>Clostridiales bacterium</i> VE202-28
Cba-8-1	Bacteria Firmicutes Clostridia <i>Clostridiales bacterium</i> VE202-29
Ece-1-1	Bacteria Firmicutes Clostridia Clostridiales Eubacteriaceae <i>Eubacterium cellulosolvens</i> 6
Eha-1-1	Bacteria Firmicutes Clostridia Clostridiales Eubacteriaceae <i>Eubacterium hallii</i> DSM 3353
Ere-1-1	Bacteria Firmicutes Clostridia Clostridiales Eubacteriaceae <i>Eubacterium rectale</i> ATCC 33656
Esp-1-1	Bacteria Firmicutes Clostridia Clostridiales Eubacteriaceae <i>Eubacterium</i> sp. 14-2
[bo-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae [Clostridium] bolteae WAL-14578
[ci-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae [Clostridium] citroniae WAL-19142
[cl-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae [Clostridium] clostridioforme WAL-7855
[sc-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae [Clostridium] scindens VE202-05
Rgn-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae <i>Blautia Ruminococcus gnavus</i> AGR2154
Rgn-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae <i>Blautia Ruminococcus gnavus</i> CC55.001C
Bfo-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae <i>Bryantella formatexigens</i> DSM 14469
Bcr-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae <i>Butyrivibrio crossotus</i> DSM 2876
Bfi-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae <i>Butyrivibrio fibrisolvens</i> AB2020
Bfi-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae <i>Butyrivibrio fibrisolvens</i> FE2007
Bfi-3-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae <i>Butyrivibrio fibrisolvens</i> ND3005
Bfi-4-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae <i>Butyrivibrio fibrisolvens</i> WTE3004

Bsp-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Butyrivibrio sp.</i> AD3002
Bsp-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Butyrivibrio sp.</i> AE2015
Bsp-3-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Butyrivibrio sp.</i> AE3009
Bsp-4-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Butyrivibrio sp.</i> FCS006
Bsp-5-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Butyrivibrio sp.</i> LB2008
Bsp-6-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Butyrivibrio sp.</i> MC2021
Bsp-7-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Butyrivibrio sp.</i> NC2007
Bsp-8-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Butyrivibrio sp.</i> VCB2001
Bsp-9-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Butyrivibrio sp.</i> WCD2001
Bsp-10-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Butyrivibrio sp.</i> XPD2006
Cmo-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Catonella morbi</i> ATCC 51271
Cle-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	Cellulosilyticum <i>Clostridium lentocellum</i> DSM 5427
Cco-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Coprococcus comes</i> ATCC 27758
Ceu-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Coprococcus eutactus</i> ATCC 27759
Csp-8-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Coprococcus sp.</i> HPP0048
Csp-9-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Coprococcus sp.</i> HPP0074
Dfo-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Dorea formicigenerans</i> 4_6_53AFAA
Dfo-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Dorea formicigenerans</i> ATCC 27755
Dlo-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Dorea longicatena</i> AGR2136
Dlo-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Dorea longicatena</i> DSM 13814
Dsp-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Dorea sp.</i> 5-2
Jig-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Johnsonella ignava</i> ATCC 51276
Lsp-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Lachnoanaerobaculum sp.</i> MSX33
Lbo-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Lachnobacterium bovis</i>
Lbo-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Lachnobacterium bovis</i> C6A12
Lbo-3-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Lachnobacterium bovis</i> NK4B19
Lba-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> 1-1.57FAA
Lba-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> 1-4.56FAA
Lba-3-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> 2-1.46FAA
Lba-4-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> 2-1.58FAA
Lba-5-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> 3-1
Lba-6-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> 3-2
Lba-7-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> 3-1.46FAA
Lba-8-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> 3-1.57FAA_CT1
Lba-9-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> 4-1.37FAA
Lba-10-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> 5-1.57FAA
Lba-11-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> 8-1.57FAA
Lba-12-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> 9-1.43BFAA
Lba-13-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> A2
Lba-14-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> A4
Lba-15-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> ICM7
Lba-16-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> M18-1
Lba-17-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> NC2008
Lba-18-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> NK4A136
Lba-19-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> NK4A179
Lba-22-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium oral taxon</i> 082 str. F0431
Lba-20-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> VE202-12
Lba-21-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>bacterium</i> VE202-23
Lor-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>oral taxon</i> 107 str. F0167
Rho-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Roseburia hominis</i> A2-183
Rin-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Roseburia intestinalis</i> L1-82
Rin-2-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Roseburia inulinivorans</i> DSM 16841
Slo-1-1	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	<i>Stomatobaculum longum</i>
Pba-1-1	Bacteria Firmicutes Clostridia Clostridiales Peptostreptococcaceae	<i>bacterium oral taxon</i> 113 str. W5053
Rfl-1-1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	<i>Ruminococcus flavefaciens</i> FD-1
Rgn-3-1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	<i>Ruminococcus gnavus</i> ATCC 29149
Rla-1-1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	<i>Ruminococcus lactaris</i> CC59.002D
Rsp-1-1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	<i>Ruminococcus sp.</i> JC304
Rto-1-1	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae	<i>Ruminococcus torques</i> ATCC 27756
env-1 to env-1176	environmental samples	

19.2 Gene contexts

Each S10-Clostridia RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one S10-Clostridia RNA are assigned a color; other domains are gray. Information about these conserved domains is given in

Section 19.3. The accession of the sequence containing each S10-Clostridia RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each S10-Clostridia RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 19.1.

abbrev.	Seq. accession		5′ at	3′ at	genes
env-1	2226990398	-	1238	1158	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-2	IMNBL1_c0000333	-	31361	31281	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-3	JGI994J12354_10007324	+	4642	4722	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-4	2227142228	-	1210	1130	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-5	2226961550	-	118	38	RNA→ ←-hypo
env-6	4491409.3_NODE.35665	-	1609	1535	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-7	DLF009_scaffold18474.3	+	2148	2217	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-8	NOF011_scaffold7296.4	-	966	897	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-9	scaffold16313_1_O2.UC-19	+	689	758	RNA→
env-10	SRS013687_Baylor_scaffold.43281	+	185	253	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-11	SRS024625_C2443234	-	144	76	RNA→
env-12	AUX0018559537.1	-	326	258	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-13	SRS011302_Baylor_scaffold.3477	+	2312	2380	RNA→ rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→
env-14	4491406.3_NODE.8170	-	1590	1522	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-15	4491409.3_NODE.14115	+	1704	1772	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-16	2013434593	+	25	93	RNA→
env-17	scaffold41095_3_MH0053	+	367	435	RNA→
env-18	SRS052697_LANL_scaffold.57795	-	276	208	RNA→ hypo→
env-19	4491407.3_NODE.19021	+	122	190	RNA→ rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→ RplC (COG0087)rplC (PRK00001)→
env-20	scaffold4401_13_MH0057	+	404	472	RNA→ rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→
env-21	4491401.3_NODE.82882	-	1562	1494	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-22	4491487.3_NODE.33289	-	2671	2603	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-23	scaffold21085_1_MH0037	-	150	82	RNA→
env-24	SRS011061_C4645920	+	238	306	RNA→
env-25	DLM001_scaffold9250.9	+	1391	1459	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-26	NLM031_scaffold272.21	-	6329	6261	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-27	SRS013521_LANL_scaffold.2326	-	159	91	RNA→
env-28	DOM019_scaffold38828.2	+	759	827	RNA→ hypo→ rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→
env-29	SRS015663_WUGC_scaffold.1713	-	288	220	RNA→ rpsJ (PRK00596)→
env-30	scaffold25433_1_O2.UC-19	-	264	196	RNA→ hypo→
env-31	SRS016095_WUGC_scaffold.35063	-	1318	1250	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-32	SRS017191_C1692823	+	852	920	RNA→ hypo→
env-33	SRS017821_Baylor_scaffold.18138	+	237	169	RNA→
env-34	SRS019030_Baylor_scaffold.35826	-	460	392	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-35	SRS019161_WUGC_scaffold.56262	+	245	313	RNA→ hypo→ rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→
env-36	SRS022609_Baylor_scaffold.55492	+	119	187	RNA→ hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-37	SRS049712_C15422763	-	95	27	RNA→ hypo→
env-38	SRS050422_LANL_scaffold.77388	-	273	205	RNA→ hypo→
env-39	SRS051031_LANL_scaffold.19825	+	1380	1448	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→

env-40	SRS055982_C1608927	+	905	973	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-41	SRS056259_LANL_scaffold_34991	-	207	139	RNA →
env-42	SRS065504_LANL_scaffold_12366	-	375	307	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-43	4491417.3_NODE_11963	-	1588	1520	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-44	SRS048870_WUGC_scaffold_9375	-	159	91	RNA →
env-45	SRS049959_WUGC_scaffold_6371	-	438	370	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-46	4491477.3_NODE_36868	+	368	436	RNA →
env-47	DLF013_scaffold3458_3	+	3322	3390	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
env-48	SRS049712_C15557807	+	731	810	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-49	scaffold7779_5_O2_UC-12	-	667	588	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-50	scaffold8248_1_O2_UC-13	+	480	559	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-51	scaffold6367_32_V1_CD-4	+	1972	2051	rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
env-52	SRS049959_WUGC_scaffold_42217	+	15227	15306	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-53	SRS063040_Baylor_scaffold_53437	-	465	386	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-54	DOM014_scaffold41515_2	-	624	545	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-55	NLF007_scaffold12381_15	+	444	523	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-56	NLM025_scaffold9675_4	-	702	623	RplD (COG0088)rplD (PRK05319) → RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-57	NOM018_scaffold2595_2	+	22357	22436	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rplI6 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) →
env-58	SRS015217_WUGC_scaffold_16052	-	586	507	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-59	DOM015_scaffold18234_5	+	4775	4854	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rplI6 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) → adk (PRK00279)ADK (pfam00406) → PRK05716 (PRK05716)MetAPI (cd01086) → infA (PRK00276)SLIF1 (cd04451) → rpmJ (PRK00465)Ribosomal_L36 (pfam00444) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-60	NOM029_scaffold14304_23	-	471	392	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-61	scaffold9930_2_MH0009	-	424	345	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-62	scaffold24332_11_MH0045	-	2664	2585	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-63	scaffold16949_1_MH0048	+	212	291	rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-64	4491484.3_NODE_8515	-	3592	3513	rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplB (PRK09374)Ribosomal_L2 (pfam00181) → rplB (PRK09374)Ribosomal_L2_C (pfam03947) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) →

env-65	NLM026_scaffold29289_1	+	154	233	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) → ADK (cd01428)AAA_17 (pfam13207) →
env-66	NLM031_scaffold32591_5	-	104111	104032	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) →
env-67	NOM019_scaffold27930_10	+	83526	83605	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-68	SRS011302_Baylor_scaffold_21352	-	474	395	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-69	SRS012273_Baylor_scaffold_14966	-	16160	16081	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) →
env-70	SRS015133_WUGC_scaffold_36610	-	2755	2676	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → rplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-71	SRS048870_WUGC_scaffold_45340	-	5622	5543	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) →
env-72	SRS051031_LANL_scaffold_20990	-	7045	6966	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →

env-73	SRS063985.LANL_scaffold_52558	+	6006	6085	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-74	SRS064276.LANL_scaffold_65717	+	3203	3282	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-75	SRS065504.LANL_scaffold_36299	+	111	190	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpl3 (CHL00143)rplC (PRK00001) →
env-76	NLM016_scaffold9518_14	-	10030	9953	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) →
env-77	scaffold5973.1.MH0070	+	109	186	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-78	DLF010_scaffold363_8	-	13570	13493	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) →
env-79	NOF005_scaffold4009_2	+	389	466	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-80	4491414.3.NODE_8789	+	2679	2756	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) → adk (PRK00279)ADK (pfam00406) → PRK05716 (PRK05716)MetAP1 (cd01086) → infA (PRK00276)S1_IF1 (cd04451) → rpmJ (PRK00465)Ribosomal_L36 (pfam00444) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) →

env-81	DOM017_scaffold3301_19	+	250	327	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) → adk (PRK00279)ADK (pfam00406) → PRK05716 (PRK05716)MetAP1 (cd01086) → infA (PRK00276)S1_IF1 (cd04451) → rpmJ (PRK00465)Ribosomal_L36 (pfam00444) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → hypo →</p>
env-82	scaffold7442_2_MH0060	+	810	887	<p>RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →</p>
env-83	DLM001_scaffold58196_1	-	43327	43250	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) →</p>
env-84	NLM015_scaffold954.6	+	5548	5625	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) →</p>
env-85	4491401.3_NODE_15713	+	3028	3095	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) →</p>
env-86	SRS024435_LANL_scaffold_25731	-	322	255	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) →</p>
env-87	4491482.3_NODE_33602	+	1071	1138	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) →</p>
env-88	UnmappedStool_Broad_scaffold_1102440	+	454	521	<p>RNA →</p>
env-89	SRS050925_C2029917	-	176	109	<p>RNA →</p>
Pba-1-1	NZ_KI259856.1	-	47470	47393	<p>RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rps19 (CHL00050)rpsS (PRK00357) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → rplO (PRK05592)Ribosomal_L27A (pfam00828) → SecY (COG0201)secY (PRK09204) →</p>
env-90	ADJS01004188.1	-	54515	54436	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) →</p>

env-91	scaffold34758_2_V1.CD-9	-	3281	3202	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) →
env-92	SRS017103_C2723434	+	281	357	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-93	SRS024331_LANL_scaffold_32721	-	2639	2563	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
env-94	scaffold19892_1_MH0040	+	1899	1975	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-95	scaffold1228_27_MH0072	-	10164	10088	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) →
env-96	scaffold14350_6_MH0053	-	1036	960	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-97	scaffold60961_3_MH0030	-	1485	1409	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-98	scaffold51359_1_O2.UC-24	-	257	181	RNA →
env-99	SRS016335_C5109370	-	393	317	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-100	SRS018817_C2118834	+	952	1028	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpl3 (CHL00143)rplC (PRK00001) →
env-101	SRS050752_LANL_scaffold_50853	-	2468	2392	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-102	4491405.3_NODE_1553	-	26834	26758	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-103	DLM022_scaffold43434_1	+	1026	1102	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-104	NLM021_scaffold24247_3	-	25270	25194	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-105	SRS014235_WUGC_scaffold_122205	-	2336	2260	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-106	SRS019601_C2046325	-	1588	1512	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-107	DLF006_scaffold12563_13	-	870	794	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-108	SRS024435_C3230964	-	2635	2559	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-109	SRS017701_C1702668	+	150	226	RNA →
env-110	scaffold12346_3_MH0031	-	1221	1145	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-111	DLM019_scaffold63082_2	-	34456	34380	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-112	scaffold8414_7_V1.CD-8	-	2764	2688	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-113	4491409.3_NODE_23640	+	28884	28960	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-114	scaffold6976_8_MH0016	+	328	403	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-115	scaffold81869_1_MH0033	-	212	137	RNA →
env-116	4491405.3_NODE_19252	+	230	305	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →

env-117	4491410.3_NODE.2064	+	423	498	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) → adk (PRK00279)ADK (pfam00406) → PRK05716 (PRK05716)MetAP1 (cd01086) → KOW_RPL14 (cd06088) → infA (PRK00276)S1_IF1 (cd04451) → rpmJ (PRK00465)Ribosomal_L36 (pfam00444) → RpsM (COG0099)rpsM (PRK05179) → PRK05309 (PRK05309)RpsK (COG0100) → RpsD (COG0522)rpsD (PRK05327) → RpoA (COG0202)PRK05182 (PRK05182) → rplQ (PRK05591)Ribosomal_L17 (pfam01196) →
env-118	4491412.3_NODE.68334	+	16503	16578	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
env-119	NOF004_scaffold6915_3	-	18884	18809	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) →
env-120	SRS052697_LANL_scaffold_30806	+	25704	25779	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-121	SRS024435_C2906239	-	134	59	RNA → hypo →
env-122	SRS047014_WUGC_scaffold_72164	-	438	365	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-123	scaffold29511_2_MH0002	-	2951	2878	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-124	scaffold7276_3_MH0061	-	2984	2911	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-125	scaffold78335_2_V1.UC-9	+	5667	5740	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-126	SRS022524_Baylor_scaffold_45135	+	2738	2811	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-127	SRS063040_Baylor_scaffold_52905	-	1532	1459	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) →
env-128	4491421.3_NODE.12916	+	171	244	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Rfl-1-1	NZ_ACOK01000089.1	-	23727	23654	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpsJ (PRK00596)RpsJ (COG0051) →
env-129	AUXO012404992.1	+	861	934	RNA →
env-130	scaffold4266_1_O2.UC-20	-	2230	2134	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-131	SRS011306_Baylor_scaffold_82937	-	355	251	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-132	SRS050244_C4490640	+	496	600	RNA →
env-133	Throat_LANL_C5678524	+	67	171	RNA → hypo →
env-134	SRS022530_LANL_scaffold_32319	-	61485	61381	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-135	SRS023617_C3177372	+	418	522	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-136	SRS024015_Baylor_scaffold_39044	+	136	240	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-137	SRS063288_LANL_scaffold_41293	-	688	584	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-138	SRS048791_C3235272	+	564	668	RNA →

env-139	SRS015057_C3265888	+	116	220	RNA→
env-140	SRS055426_C3279481	+	716	820	RNA→
env-141	SRS023557_C1764443	+	1478	1582	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-142	SRS014888_C3060382	+	418	522	RNA→
env-143	SRS024580_LANL_scaffold_44876	-	1561	1457	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-144	SRS014124_C2621890	-	1301	1197	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-145	SRS015893_WUGC_scaffold_31047	+	1959	2063	RNA→ rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→
env-146	SRS018591_WUGC_scaffold_38862	-	55571	55467	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-147	SRS051791_LANL_scaffold_46426	-	75884	75780	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-148	SRS011140_Baylor_scaffold_51353	+	94	198	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-149	SRS012279_Baylor_scaffold_56090	+	690	794	RNA→
env-150	SRS014271_C2921876	-	218	114	RNA→
env-151	SRS014684_WUGC_scaffold_40865	+	1287	1391	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-152	SRS014689_WUGC_scaffold_1936	-	994	890	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-153	SRS019027_C1823783	-	185	81	RNA→ hypo→
env-154	SRS024081_C2636285	-	218	114	RNA→
env-155	SRS042910_C5605950	+	684	788	RNA→
env-156	SRS062544_LANL_scaffold_74780	+	5551	5655	RNA→
env-157	SRS064423_LANL_scaffold_33619	+	10606	10710	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-158	SRS019122_C5850384	+	204	308	RNA→ rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→
env-159	SRS065278_LANL_scaffold_1918	+	684	788	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-160	SRS014692_C1424509	+	220	324	RNA→
env-161	SRS017713_C3272311	+	140	245	RNA→
Cmo-1-1	NZ_KI535366.1	-	700966	700861	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-162	SRS022725_C5792968	-	517	412	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-163	SRS022602_Baylor_scaffold_110235	+	21	126	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
Ece-1-1	NZ_CM001487.1	+	2574980	2575059	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→ rpsJ (PRK00596)RpsJ (COG0051)→
env-164	AUX0017143398.1	+	3141	3243	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
Bfi-3-1	NZ_ATVY01000026.1	-	26672	26570	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
Bfi-4-1	NZ_AUJV01000009.1	+	23517	23619	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
Bfi-1-1	NZ_ATVZ01000006.1	-	67223	67121	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
Bfi-2-1	NZ_AUJW01000021.1	-	71753	71651	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-165	SRS013252_Baylor_scaffold_21948	-	7197	7095	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→ RplC (COG0087)rplC (PRK00001)→ rplD (PRK05319)Ribosomal_L4 (pfam00573)→ rplW (PRK05738)Ribosomal_L23 (pfam00276)→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ rpl16 (CHL00044)rplP (PRK09203)→ PRK00306 (PRK00306)Ribosomal_L29 (pfam00831)→ rpsQ (PRK05610)Ribosomal_S17 (pfam00366)→ rplN (PRK05483)Ribosomal_L14 (pfam00238)→ RplX (COG0198)rplX (PRK00004)→ rplE (PRK00010)RplE (COG0094)→ rpsN (PRK08061)RpsN (COG0199)→
env-166	SRS011126_C4671534	-	242	140	RNA→
env-167	SRS013533_C5425190	+	425	527	RNA→
env-168	SRS045197_C3557001	+	691	793	RNA→
env-169	SRS049318_LANL_scaffold_176197	+	2049	2151	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→ RplC (COG0087)rplC (PRK00001)→ rplD (PRK05319)Ribosomal_L4 (pfam00573)→ rplW (PRK05738)Ribosomal_L23 (pfam00276)→ rplB (PRK09374)Ribosomal_L2 (pfam00181)→
env-170	SRS013170_Baylor_scaffold_134367	-	1061	959	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→ RplC (COG0087)rplC (PRK00001)→
env-171	SRS011152_C4188878	-	220	118	RNA→ hypo→
env-172	SRS022602_Baylor_scaffold_37959	-	16760	16658	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→ RplC (COG0087)rplC (PRK00001)→ rplD (PRK05319)Ribosomal_L4 (pfam00573)→ rplW (PRK05738)Ribosomal_L23 (pfam00276)→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ rpl16 (CHL00044)rplP (PRK09203)→ PRK00306 (PRK00306)Ribosomal_L29 (pfam00831)→ rpsQ (PRK05610)Ribosomal_S17 (pfam00366)→ rplN (PRK05483)Ribosomal_L14 (pfam00238)→ RplX (COG0198)rplX (PRK00004)→ rplE (PRK00010)RplE (COG0094)→ rpsN (PRK08061)RpsN (COG0199)→

env-173	DLM028_scaffold27170_5	-	1772	1666	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-174	DLF010_scaffold24_15	-	1235	1129	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-175	scaffold958_4_MH0086	-	199	94	RNA →
env-176	UnmappedStool_Broad_scaffold_346780	+	64	169	RNA → ← hypō
env-177	scaffold29314_3_MH0080	-	202	97	RNA →
env-178	4491414_3_NODE_953	-	28628	28523	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-179	scaffold20541_3_MH0083	-	207	102	RNA →
env-180	SRS011061_C4862922	-	895	792	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-181	SRS016989_C1563263	-	492	389	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-182	SRS019267_C3574650	+	121	224	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-183	scaffold1958_7_MH0014	-	1410	1307	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-184	scaffold37912_1_V1_CD-4	+	65	168	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-185	scaffold70413_1_MH0035	-	229	126	RNA →
env-186	NLM021_scaffold9243_17	+	2752	2855	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-187	NLM031_scaffold29725_6	+	96	199	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-188	SRS052697_LANL_scaffold_50890	+	162	265	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) →
env-189	scaffold33193_1_V1_UC-14	+	65	168	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-190	4491490_3_NODE_5470	+	114	217	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-191	4491412_3_NODE_89684	+	7189	7292	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-192	NLF005_scaffold9646_4	-	866	763	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-193	scaffold8051_7_MH0055	-	726	623	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-194	NOF008_scaffold890_10	-	417	314	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-195	scaffold31333_4_MH0028	-	751	648	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-196	scaffold6771_3_MH0033	-	1483	1380	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-197	scaffold30659_3_V1_UC-10	+	703	806	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-198	4491487_3_NODE_19593	+	2229	2332	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-199	SRS011239_C2472698	+	137	240	RNA →
env-200	SRS013687_Baylor_scaffold_53562	+	167	270	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) →
env-201	SRS014979_WUGC_scaffold_29225	-	1526	1423	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) →
env-202	SRS015133_WUGC_scaffold_33347	-	754	651	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rplC (PRK00001) →
env-203	SRS015854_WUGC_scaffold_34494	-	1175	1072	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-204	SRS021948_C2578511	+	115	218	RNA →
env-205	SRS051031_LANL_scaffold_55309	+	2873	2976	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-206	SRS063985_LANL_scaffold_39954	-	2666	2563	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → rplB (PRK09374)Ribosomal_L2 (pfam0181) →
env-207	SRS065504_LANL_scaffold_46409	-	492	389	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-208	SRS014613_WUGC_scaffold_17595	-	3925	3822	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-209	SRS019161_WUGC_scaffold_54925	+	161	264	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-210	SRS053335_C2500585	-	1526	1423	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) →
env-211	SRS064276_LANL_scaffold_32780	-	2864	2761	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
Lba-19-1	NZ_ATWC01000002.1	-	171387	171260	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Lba-17-1	NZ_JHWS01000005.1	+	279183	279268	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-212	AUXO018772739.1	-	475	390	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Lba-18-1	NZ_ATVW01000015.1	+	20018	20103	RNA → rpsJ (PRK00596)RpsJ (COG0051) →

env-213	08_07_XOS_DNA_scaffold44549.1	-	5717	5619	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-214	SRS011529_WUGC_scaffold_31649	+	2893	2977	RNA →
env-215	scaffold20711_4_V1.CD-13	-	153	69	RNA →
env-216	scaffold537_5_V1.UC-14	+	2694	2778	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-217	4491423.3_NODE_119558	-	2026	1942	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-218	SRS019582_WUGC_scaffold_26056	-	3718	3634	RNA → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) →
env-219	scaffold4496.1_MH0063	+	3017	3101	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-220	scaffold10033_5_MH0081	-	153	69	RNA →
env-221	NLF007_scaffold23667_30	-	6135	6051	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-222	NLM021_scaffold31892_2	+	6861	6945	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-223	NLF013_scaffold4173_33	-	4292	4208	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-224	SRS020328_Baylor_scaffold_12580	-	6998	6914	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-225	scaffold27081_10_MH0017	+	123	207	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-226	scaffold2277_2_MH0077	-	340	256	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-227	DOM012_scaffold9226_17	-	1293	1209	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-228	SRS015217_WUGC_scaffold_10150	+	19846	19930	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Csp-6-1	NZ_DS480326.1	-	124987	124903	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-229	4491421.3_NODE_4750	+	252	336	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-230	4491477.3_NODE_51506	+	30052	30136	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-231	4491487.3_NODE_4692	+	19908	19992	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-232	SRS013951_WUGC_scaffold_4945	-	9240	9156	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-233	SRS019161_WUGC_scaffold_49940	-	431	347	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-234	scaffold7691.3_MH0009	+	6985	7069	RNA →
env-235	scaffold13176_2_O2.UC-16	-	193	109	RNA →
env-236	DLM018_scaffold17866_11	-	6083	5999	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-237	DLF010_scaffold22271_21	-	10166	10082	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-238	NOM012_scaffold41665_2	+	16835	16919	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-239	NOM016_scaffold4013_10	+	667	751	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-240	NOM017_scaffold8338_6	-	739	655	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-241	SRS023914_Baylor_scaffold_6440	+	34973	35057	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-242	ASRL01000150.1	-	7972	7887	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → rplX (PRK00004)KOW_RPL26 (cd06089) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rpl6 (CHL00140)rplF (PRK05498) →
env-243	ASRM01003264.1	-	570	485	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-244	ASRK01000096.1	+	8848	8933	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → rplX (PRK00004)KOW_RPL26 (cd06089) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rpl6 (CHL00140)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) →
env-245	ASRN01000847.1	-	99	14	RNA →
env-246	ASRP01009196.1	-	99	14	RNA →

env-247	NLF011_scaffold23581_7	-	12837	12749	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-248	NLM010_scaffold2128_3	+	5986	6074	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-249	scaffold18342_7.V1.UC-21	-	2390	2302	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-250	NLM029_scaffold31899_2	+	10319	10407	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-251	SRS011271_WUGC_scaffold_26754	+	5636	5724	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-252	scaffold20388_1.O2.UC-13	+	2191	2279	RNA →
env-253	SRS014613_WUGC_scaffold_26039	-	294	206	RNA →
env-254	SRS016095_WUGC_scaffold_35198	-	490	402	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-255	SRS054956_LANL_scaffold_18901	-	202	114	RNA →
env-256	SRS064276_LANL_scaffold_57665	-	294	206	RNA → hypo →
env-257	DLM028_scaffold41246_2	+	204	292	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-258	DOF004_scaffold21058_13	+	2014	2102	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-259	NOF008_scaffold41486_5	+	1075	1163	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-260	NOF012_scaffold7935_4	+	3601	3689	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-261	NOM007_scaffold1962_10	+	1752	1840	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-262	NOF013_scaffold28708_1	+	3005	3093	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-263	NOM010_scaffold39587_3	-	29192	29104	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-264	SRS051031_LANL_scaffold_52982	+	5566	5654	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-265	scaffold4680_1.V1.CD-14	-	1154	1066	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-266	scaffold16707_1.MH0043	-	163	82	RNA →
env-267	scaffold992_1.V1.CD-12	+	593	674	RNA →
env-268	scaffold8291_2.V1.CD-3	+	6188	6269	RNA →
env-269	scaffold15225_3.V1.UC-14	+	341	422	RNA →
env-270	SRS022524_Baylor_scaffold_28649	-	181	100	RNA →
env-271	SRS014287_WUGC_scaffold_7770	+	492	573	RNA →
env-272	SRS015065_WUGC_scaffold_7960	-	167	86	RNA →
env-273	SRS015264_WUGC_scaffold_19803	+	17439	17520	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-274	SRS017701_Baylor_scaffold_14318	+	838	919	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-275	SRS019968_Baylor_scaffold_7511	-	182	101	RNA →
env-276	SRS048870_WUGC_scaffold_19339	-	180	99	RNA →
env-277	SRS052697_LANL_scaffold_12986	-	165	84	RNA →
env-278	SRS056519_LANL_scaffold_13514	-	181	100	RNA →
env-279	SRS062427_LANL_scaffold_6177	-	181	100	RNA →
env-280	scaffold9779_1.MH0068	-	164	83	RNA →
env-281	scaffold17921_1.MH0044	-	167	86	RNA →
env-282	4491413_3.NODE.441	-	240	159	RNA →
env-283	scaffold2177_1.V1.CD-9	+	18517	18598	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-284	DLM018_scaffold20549_34	-	471	390	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-285	NLF001_scaffold2_2	-	42911	42830	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-286	NOF005_scaffold12064_3	+	6160	6241	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-287	NOM015_scaffold4921_10	+	5913	5994	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-288	DOM026_scaffold32809_1	+	1451	1532	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-289	NLM029_scaffold10880_16	+	1008	1089	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-290	SRS011271_WUGC_scaffold_252	-	2128	2047	RNA → rplC (COG0087)rplC (PRK00001) → rplD (PRK05319)rplW (PRK05738)Ribosomal.L23 (pfam00276)Ribosomal.L4 (pfam00573) →
env-291	scaffold20849_1.MH0039	-	167	86	RNA →
env-292	scaffold13214_3.MH0063	+	341	422	RNA →
env-293	scaffold22108_1.V1.CD-8	-	167	86	RNA →
env-294	SRS015217_WUGC_scaffold_8594	-	165	84	RNA →
env-295	SRS019601_WUGC_scaffold_8958	-	167	86	RNA →
env-296	SRS019685_WUGC_scaffold_21426	-	181	100	RNA →
env-297	SRS042628_WUGC_scaffold_8232	+	494	575	RNA →

env-298	SRS043701_LANL_scaffold.11145	-	181	100	RNA→
env-299	SRS053335_LANL_scaffold.10264	-	181	100	RNA→ hypo→
env-300	scaffold3402.4_MH0042	+	4470	4551	RNA→
env-301	scaffold5536.2_MH0066	-	142	61	RNA→
env-302	SRS017247_C943587	-	122	41	RNA→ hypo→
env-303	SRS023526_Baylor_scaffold.5213	-	167	86	RNA→
env-304	SRS043411_WUGC_scaffold.5719	-	1184	1103	RNA→ rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→ hypo→
env-305	SRS058723_Baylor_scaffold.3070	-	335	254	RNA→ rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→
env-306	BABB01001370.1	-	4795	4714	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-307	scaffold23001.1_MH0033	-	167	86	RNA→
env-308	SRS049164_WUGC_scaffold.27429	-	180	99	RNA→
env-309	DLM023_scaffold28443.2	-	4447	4366	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-310	NLF007_scaffold22991.5	-	331	250	RNA→ rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→
env-311	NOM001_scaffold36725.1	-	25726	25645	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-312	ADJS01009405.1	+	3228	3309	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-313	SRS015854_WUGC_scaffold.8959	-	679	598	RNA→ RplC (COG0087)rplC (PRK00001)→
env-314	SRS024075_LANL_scaffold.4405	+	2401	2482	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-315	SRS063040_Baylor_scaffold.7602	-	1030	949	RNA→ RplC (COG0087)rplC (PRK00001)→
env-316	scaffold4160.1_MH0021	-	165	84	RNA→
env-317	scaffold8722.1_MH0027	-	177	96	RNA→
env-318	scaffold17060.5_MH0028	+	6414	6495	RNA→
env-319	scaffold8943.6_MH0053	+	593	674	RNA→
env-320	scaffold51963.3_MH0057	+	6208	6289	RNA→
env-321	scaffold8695.1_MH0084	-	165	84	RNA→
env-322	scaffold6602.1_O2.UC-14	-	165	84	RNA→
env-323	scaffold5800.2_O2.UC-16	+	6220	6301	RNA→
env-324	scaffold14590.1_V1.CD-4	-	163	82	RNA→
env-325	scaffold3608.3_V1.UC-7	+	6221	6302	RNA→
env-326	SRS015190_WUGC_scaffold.6257	-	167	86	RNA→
env-327	SRS015782_WUGC_scaffold.7626	-	167	86	RNA→
env-328	SRS042284_WUGC_scaffold.5200	-	167	86	RNA→ hypo→
env-329	SRS047044_WUGC_scaffold.9146	-	181	100	RNA→ hypo→
env-330	SRS053398_LANL_scaffold.13945	+	18555	18636	RNA→ rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→
env-331	scaffold18582.3_MH0040	-	322	241	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-332	scaffold13759.1_MH0046	-	162	81	RNA→
env-333	scaffold16705.1_O2.UC-22	-	165	84	RNA→
env-334	4491401.3_NODE.53304	+	618	699	RNA→ rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→
env-335	4491417.3_NODE.3394	+	16865	16946	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-336	DLF005_scaffold17120.4	-	40417	40336	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-337	DLM008_scaffold2771.2	+	6173	6254	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-338	DOF003_scaffold17942.4	+	360	441	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-339	NLM004_scaffold3966.5	+	12804	12885	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-340	NOM005_scaffold3277.7	-	7989	7908	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-341	4491409.3_NODE.22629	-	14580	14499	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-342	4491420.3_NODE.5117	+	55138	55219	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-343	DOM017_scaffold32436.1	-	804	723	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-344	NLF006_scaffold12057.2	-	969	888	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-345	NLM006_scaffold7171.11	-	3023	2942	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-346	SRS014683_WUGC_scaffold.18380	+	33	114	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
Ere-1-1	NC_012781.1	+	383105	383186	RNA→ rpsJ (PRK00596)RpsJ (COG0051)→
env-347	SRS015578_WUGC_scaffold.8463	-	165	84	RNA→
env-348	SRS019161_WUGC_scaffold.21627	-	180	99	RNA→ hypo→

env-349	SRS024132_Baylor_scaffold_5045	-	165	84	RNA→	
env-350	SRS048164_WUGC_scaffold_7310	+	1960	2041	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-351	SRS078176_LANL_scaffold_9297	-	182	101	RNA→	
env-352	scaffold19886_8.MH0004	+	1468	1549	RNA→	
env-353	4491414.3_NODE_10232	+	18886	18967	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-354	DLM002_scaffold19292_4	-	1385	1304	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-355	DOM013_scaffold53913_3	-	42788	42707	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-356	NLM010_scaffold33432_2	+	26633	26714	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-357	NLM032_scaffold5645_33	-	3767	3686	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-358	NOM009_scaffold4493_3	-	42879	42798	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-359	NLM022_scaffold12984_2	+	6167	6248	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-360	NOM018_scaffold8271_1	+	75	156	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-361	SRS014459_WUGC_scaffold_14109	+	10605	10686	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-362	SRS019030_Baylor_scaffold_218	+	268	349	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-363	SRS054956_LANL_scaffold_7970	-	167	86	RNA→	
env-364	BABG01016216.1	-	115	34	RNA→	
env-365	scaffold3598_2.MH0037	+	1682	1763	RNA→	rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→
env-366	DLM027_scaffold716_3	-	3549	3468	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-367	NOF010_scaffold33104_25	-	4436	4355	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-368	DLM028_scaffold6833_1	-	574	493	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-369	NLF011_scaffold1666_1	-	295	214	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-370	NLM008_scaffold17066_1	-	5551	5470	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-371	NLM028_scaffold4257_4	-	40205	40124	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-372	DLF003_scaffold1033_10	+	1103	1184	RNA→	rpsJ (PRK00596)Ribosomal_S10 (pfam00338)→
env-373	DLM006_scaffold1766_11	+	1075	1156	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-374	NLM021_scaffold5173_1	-	5388	5307	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-375	scaffold16666_5_V1.CD-11	-	140	59	RNA→	
env-376	RUMENNODE.1856948.1	+	5532	5635	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
Bsp-5-1	NZ_KK211308.1	-	207215	207112	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-377	SRS017227_Baylor_scaffold_139101	-	221	145	RNA→	
env-378	SRS042984_LANL_scaffold_21113	+	2212	2288	RNA→	
env-379	SRS018443_Baylor_scaffold_52281	-	249	173	RNA→	
env-380	SRS018157_C4833961	-	217	141	RNA→	
env-381	SRS053917_LANL_scaffold_98590	+	169	245	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→ RplC (COG0087)rplC (PRK00001)→
env-382	SRS017139_Baylor_scaffold_54237	+	946	1022	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-383	SRS024355_LANL_scaffold_90040	+	571	647	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→
env-384	SRS018394_Baylor_scaffold_71324	+	824	900	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→ RplC (COG0087)rplC (PRK00001)→ rplD (PRK05319)Ribosomal_L4 (pfam00573)→
Lor-1-1	NZ_GL890598.1	+	12752	12828	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→ RplC (COG0087)rplC (PRK00001)→ rplD (PRK05319)Ribosomal_L4 (pfam00573)→ rplW (PRK05738)Ribosomal_L23 (pfam00276)→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ rpl16 (CHL00044)rplP (PRK09203)→ PRK00306 (PRK00306)Ribosomal_L29 (pfam00831)→ rpsQ (PRK05610)Ribosomal_S17 (pfam00366)→ rplN (PRK05483)Ribosomal_L14 (pfam00238)→ RplX (COG0198)rplX (PRK00004)→ rplE (PRK00010)RplE (COG0094)→ rpsN (PRK08061)RpsN (COG0199)→ hypo→ RNA→
env-385	SRS014690_C1764201	-	155	79	RNA→	
env-386	SRS047634_LANL_scaffold_48885	+	6495	6571	RNA→	rpsJ (PRK00596)RpsJ (COG0051)→ RplC (COG0087)rplC (PRK00001)→ rplD (PRK05319)Ribosomal_L4 (pfam00573)→ rplW (PRK05738)Ribosomal_L23 (pfam00276)→ RplB (COG0090)rplB (PRK09374)→ rpsS (PRK00357)RpsS (COG0185)→ rplV (PRK00565)Ribosomal_L22 (pfam00237)→ RpsC (COG0092)rpsC (PRK00310)→ rpl16 (CHL00044)rplP (PRK09203)→ PRK00306 (PRK00306)Ribosomal_L29 (pfam00831)→ rpsQ (PRK05610)Ribosomal_S17 (pfam00366)→ rplN (PRK05483)Ribosomal_L14 (pfam00238)→ RplX (COG0198)rplX (PRK00004)→ rplE (PRK00010)RplE (COG0094)→ rpsN (PRK08061)RpsN (COG0199)→

env-387	SRS017304_C2019822	+	4855	4931	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-388	SRS047824_WUGC_scaffold_310	+	15740	15815	RNA →
Lba-15-1	NZ_ALJL01000022.1	+	187340	187415	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-389	SRS063288_C2574221	+	262	337	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-390	SRS013879_C2821049	-	196	121	RNA →
env-391	SRS022530_LANL_scaffold_1983	-	1053	978	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-392	SRS024381_LANL_scaffold_11259	+	59	134	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
env-393	SRS055426_C3279857	+	722	797	RNA →
env-394	SRS063193_LANL_scaffold_16021	+	86	161	RNA →
env-395	SRS013502_C2153529	+	97	172	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-396	SRS018969_WUGC_scaffold_55533	+	372	447	RNA →
env-397	SRS023352_LANL_scaffold_14387	-	2374	2299	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-398	SRS024580_C3068412	-	734	659	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpl3 (CHL00143)rplC (PRK00001) →
env-399	SRS057692_LANL_scaffold_52939	-	1542	1467	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) →
env-400	SRS013164_C2331459	-	765	690	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpl3 (CHL00143)rplC (PRK00001) →
env-401	SRS018357_C3826668	+	11	86	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
Lsp-1-1	NZ_AZXX01000062.1	-	191602	191527	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-402	SRS019026_C1857454	+	146	221	RNA →
env-403	SRS024277_C2778072	-	387	312	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-404	SRS050628_LANL_scaffold_2158	-	310	235	RNA → hypo → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-405	SRS057539_LANL_scaffold_17399	+	419	494	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-406	SRS013234_C2990282	-	236	161	RNA →

Lba-22-1	NZ_JH591133.1	+	12060	12135	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → hypo → hypo → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsN (PRK08061)RpsN (COG0199) → hypo →
env-407	SRS015893_C2284730	+	70	145	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-408	SRS020856_C2635639	+	618	693	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-409	SRS024318_LANL_scaffold_69413	+	130	205	RNA →
env-410	SRS053603_LANL_scaffold_68274	+	71	146	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
Cba-3-1	NZ_JH815185.1	-	1384295	1384220	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-411	SRS014684_C3308960	-	1490	1415	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) →
env-412	SRS019027_C1949428	+	180	255	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-413	SRS019045_C2675630	+	109	184	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-414	SRS014573_WUGC_scaffold_30532	-	229	140	RNA → hypo →
env-415	SRS019071_C5206406	+	1242	1331	RNA →
env-416	SRS018300_Baylor_scaffold_8057	-	2973	2884	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-417	SRS016225_C2883210	+	201	290	RNA →
env-418	SRS021496_C2575557	-	99	10	RNA → hypo →
env-419	SRS024441_C2869459	-	99	10	RNA → hypo →
env-420	SRS012279_Baylor_scaffold_34972	-	551	462	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-421	SRS015762_C3488345	-	99	10	RNA →
env-422	SRS017209_Baylor_scaffold_18507	-	18184	18095	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) →
env-423	SRS022077_C2576020	+	2624	2713	RNA →
env-424	SRS050669_LANL_scaffold_22401	+	2618	2707	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-425	SRS057205_C3496056	-	99	10	RNA →
env-426	SRS057692_LANL_scaffold_28820	-	18094	18005	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) →
env-427	SRS015797_C2672144	+	11515	11604	RNA →
env-428	SRS014683_WUGC_scaffold_48805	+	91	186	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-429	scaffold12439_3_MH0067	-	209	114	RNA →
env-430	NLM032_scaffold38249_2	-	401	306	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →

env-431	4491413.3_NODE.14619	-	17813	17718	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-432	SRS011271.C2970480	+	148	243	RNA →
env-433	SRS023526_Baylor_scaffold.8422	-	1165	1070	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-434	4491406.3_NODE.11036	-	1072	977	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-435	scaffold7196.1_MH0055	-	1151	1056	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-436	scaffold9574.3_MH0014	-	209	114	RNA → hypo →
env-437	scaffold46288.2_MH0086	+	2014	2109	RNA →
env-438	SRS011302.C3223053	+	118	213	RNA →
env-439	SRS014459_WUGC_scaffold.42270	-	1165	1070	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-440	SRS015133.C3303308	-	273	178	RNA →
env-441	SRS015578_WUGC_scaffold.16888	-	1170	1075	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-442	SRS015663.C2978496	-	273	178	RNA →
env-443	SRS015782.C3242805	-	273	178	RNA → hypo →
env-444	SRS016018.C1196800	-	273	178	RNA → hypo →
env-445	SRS017103.C2464388	-	273	178	RNA →
env-446	SRS018817.C1930195	+	96	191	RNA →
env-447	SRS019968.C1951730	-	273	178	RNA →
env-448	SRS042628_WUGC_scaffold.32234	+	9421	9516	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-449	SRS048164_WUGC_scaffold.13083	-	3276	3181	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-450	SRS050925_LANL_scaffold.67534	+	108	203	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-451	SRS051031.C2444620	+	152	247	RNA →
env-452	SRS053335_LANL_scaffold.29138	-	760	665	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-453	SRS056259_LANL_scaffold.47056	-	1427	1332	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-454	scaffold31147.1_MH0058	-	109	14	RNA →
env-455	SRS015190_WUGC_scaffold.27972	-	760	665	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-456	DLM028_scaffold21444.3	+	2563	2658	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-457	scaffold5136.1_MH0064	+	124	219	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-458	SRS045004_LANL_scaffold.32382	-	760	665	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-459	UnmappedStool_Broad_scaffold.717639	+	562	657	RNA →
env-460	SRS011586.C3298925	-	179	84	RNA →
env-461	SRS019685.C8263105	-	253	158	RNA →
env-462	SRS020233.C4054417	+	326	421	RNA →
env-463	SRS049712.C15431011	-	273	178	RNA → hypo →
env-464	SRS017521.C2498973	-	169	74	RNA → hypo →
env-465	SRS019910_WUGC_scaffold.74754	+	108	203	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-466	SRS053398_LANL_scaffold.39694	+	2463	2558	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-467	4491410.3_NODE.67969	+	66	161	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-468	ADJS01016428.1	+	3391	3486	RNA →
env-469	SRS016954.C2721358	-	273	178	RNA → hypo →
env-470	scaffold47201.1.O2.UC-22	-	1074	979	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-471	scaffold32854.6.V1.UC-21	+	2000	2095	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-472	NLM026_scaffold284.3	-	861	766	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-473	scaffold3368.2_MH0011	-	209	114	RNA →
env-474	scaffold23333.3_MH0069	-	209	114	RNA →
env-475	scaffold52193.1_MH0075	-	232	137	RNA →
env-476	scaffold40929.1.V1.UC-15	-	231	136	RNA →
env-477	scaffold25089.3.V1.UC-18	+	908	1003	RNA →
env-478	SRS016335.C5051729	-	108	13	RNA →
env-479	SRS052697_LANL_scaffold.44674	+	797	892	RNA →
env-480	SRS058770.C1525436	-	131	36	RNA →
env-481	SRS065504.C3209247	-	273	178	RNA →
env-482	SRS019582_WUGC_scaffold.83695	+	77	172	RNA → rpsJ (PRK00596)RpsJ (COG0051) →

env-483	SRS043411_WUGC_scaffold_47208	+	82	177	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-484	scaffold74289_5_MH0035	+	677	772	RNA →
env-485	DLM007_scaffold38_46	+	2742	2837	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-486	SRS016095_C2550551	-	273	178	RNA →
env-487	scaffold16164_3_MH0028	+	501	596	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-488	scaffold14432_2_MH0039	-	208	113	RNA →
env-489	scaffold7811_8_MH0072	+	11840	11919	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-490	NLF001_scaffold1614_22	+	1732	1811	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-491	NLM023_scaffold1764_27	-	4212	4133	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-492	NOM009_scaffold20333_9	+	194	273	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-493	SRS015578_WUGC_scaffold_19979	-	174	95	RNA →
env-494	DLF007_scaffold11184_3	+	706	785	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-495	DOM013_C728173_1	+	213	292	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-496	SRS016335_WUGC_scaffold_19721	-	664	585	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-497	DOM010_scaffold44278_1	+	145859	145938	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-498	NLF005_scaffold29876_2	-	619	540	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-499	SRS063040_Baylor_scaffold_18425	-	174	95	RNA → hypo →
env-500	DOF013_scaffold497_1	-	750	671	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-501	NOM026_scaffold9794_3	+	191	270	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-502	UnmappedStool_Broad_scaffold_88209	-	174	95	RNA →
env-503	DOF004_scaffold20309_1	-	817	738	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-504	DOM015_scaffold13120_2	+	30031	30110	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-505	DOM016_scaffold32429_1	-	806	727	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-506	NLF012_scaffold128_1	-	817	738	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-507	NLM007_scaffold9577_1	+	38620	38699	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-508	NLM022_scaffold16572_1	+	39462	39541	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-509	NOM004_scaffold7882_14	+	3208	3287	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-510	NOM014_scaffold27246_1	-	435	356	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-511	NOM020_scaffold37871_1	-	399	320	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-512	scaffold1071_13_V1_UC-21	-	1569	1489	RNA → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) →
env-513	scaffold63164_1_MH0035	-	406	326	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-514	scaffold6429_5_MH0064	-	1119	1039	RNA → RplC (COG0087)rplC (PRK00001) →
env-515	scaffold4634_3_V1_UC-17	-	1536	1456	RNA → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) →
env-516	SRS014235_WUGC_scaffold_50709	+	24455	24535	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-517	scaffold16691_6_MH0060	-	1548	1468	RNA → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) →
env-518	scaffold10811_1_MH0002	-	1137	1057	RNA → RplC (COG0087)rplC (PRK00001) →
env-519	scaffold66919_2_MH0012	+	21859	21939	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-520	scaffold3200_2_MH0026	+	11311	11391	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-521	scaffold3869_3_MH0028	-	1569	1489	RNA → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) →
env-522	scaffold64021_1_MH0050	-	1005	925	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-523	scaffold41845_1_MH0051	-	684	604	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-524	scaffold25986_1_MH0083	+	7731	7811	RNA →
env-525	scaffold4557_5_O2_UC-24	-	329	249	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-526	4491414_3_NODE_889	-	1611	1531	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-527	4491423_3_NODE_15108	+	887	967	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-528	4491484_3_NODE_8519	+	26186	26266	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-529	4491487_3_NODE_1076	-	407	327	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-530	DLF003_scaffold10360_5	+	291	371	RNA →
env-531	DLF005_C790551_1	-	263	183	RNA →
env-532	DLM028_scaffold47970_1	+	28193	28273	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-533	NLF006_scaffold8323_3	-	902	822	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-534	NLF007_scaffold181_2	-	911	831	RNA → rpsJ (PRK00596)RpsJ (COG0051) →

env-535	NLF011_scaffold2872_3	+	6086	6166	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-536	NLF013_scaffold25874_1	+	29048	29128	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-537	NLM001_scaffold144_5	-	903	823	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-538	NLM004_scaffold47788_3	-	900	820	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-539	NLM025_scaffold70_10	-	912	832	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-540	NLM029_scaffold41578_1	+	28952	29032	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-541	NOF004_scaffold164_8	-	869	789	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-542	NOF014_scaffold249_4	-	49901	49821	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-543	NOM010_scaffold40130_2	+	24785	24865	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-544	NOM013_scaffold112_2	-	911	831	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-545	NOM019_scaffold39671_3	+	26855	26935	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-546	SRS011271_WUGC_scaffold_4629	-	677	597	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-547	SRS013521_C1519763	+	436	516	RNA →
env-548	SRS014459_WUGC_scaffold_70819	+	921	1001	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-549	SRS015065_WUGC_scaffold_12019	-	3797	3717	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-550	SRS015782_WUGC_scaffold_23904	-	233	153	RNA →
env-551	SRS017307_Baylor_scaffold_21108	+	4913	4993	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-552	SRS019582_WUGC_scaffold_43199	-	686	606	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-553	SRS019685_WUGC_scaffold_38431	-	441	361	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-554	SRS024132_Baylor_scaffold_10696	-	378	298	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-555	SRS051031_LANL_scaffold_22555	+	19118	19198	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-556	SRS011239_C2445216	+	87	167	RNA → hypo →
env-557	scaffold46369_1_MH0040	+	9444	9524	RNA → RplC (COG0087)rplC (PRK00001) →
env-558	scaffold1151_7_O2.UC-14	+	3292	3372	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-559	NLM010_scaffold13542_1	+	29117	29197	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-560	SRS016335_C5035038	+	205	285	RNA →
env-561	scaffold5557_2_MH0036	+	17078	17158	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-562	JGI994J12354_10001975	+	15910	16006	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
env-563	2227187752	-	1209	1113	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-564	JGI994J12354_10004218	-	3107	3011	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
env-565	2227464663	-	1219	1123	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
Bsp-4-1	NZ_KE384203.1	-	447202	447101	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Bsp-7-1	NZ_ATWY01000018.1	-	18605	18504	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Bsp-8-1	NZ_AUIZ01000002.1	-	353991	353890	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Bsp-10-1	NZ_ATVT01000003.1	+	3764	3865	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-566	RUMENNODE_3010558_1	+	335	436	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Bsp-2-1	NZ_ATVR01000004.1	+	28829	28932	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Bsp-3-1	NZ_ATVS01000010.1	+	72924	73025	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Bsp-6-1	NZ_JHXX01000001.1	-	1304332	1304231	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-567	4491415_3_NODE_18881	+	4525	4614	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-568	scaffold6327_2_MH0061	+	8496	8585	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-569	NLF011_scaffold13765_1	+	307	396	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-570	scaffold3636_3_O2.UC-1	+	564	653	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-571	4491409_3_NODE_31461	-	26153	26064	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-572	4491413_3_NODE_8050	-	15619	15530	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-573	4491477_3_NODE_7209	+	2699	2788	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-574	NLM026_scaffold55560_5	+	459	548	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-575	NOF004_scaffold311_1	-	5383	5294	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-576	SRS014459_WUGC_scaffold_12493	+	297	386	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-577	SRS017307_Baylor_scaffold_11892	-	793	704	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rplC (PRK00001) →
env-578	DLF004_scaffold35964_6	-	21511	21422	RNA → rpsJ (PRK00596)RpsJ (COG0051) →

env-579	DLF010_scaffold23_3	-	21633	21544	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-580	DLM028_scaffold54551_3	+	250	339	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-581	DLM014_scaffold42817_10	+	4633	4722	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-582	DOM015_scaffold8595_1	+	338	427	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-583	NLF002_scaffold9596_6	+	236	325	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-584	NLF007_scaffold40019_1	+	4162	4251	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-585	SRS011405_WUGC_scaffold_20040	-	262	173	RNA →
env-586	SRS013951_WUGC_scaffold_50787	-	472	383	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-587	SRS023914_Baylor_scaffold_17099	+	141	230	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-588	NLM015_scaffold23209_1	+	303	392	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-589	scaffold17594_1_MH0026	-	1172	1083	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-590	scaffold24884_1_O2.UC-17	+	242	331	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-591	4491404.3_NODE_83831	+	1313	1402	RNA → hypo →
env-592	4491421.3_NODE_88475	-	10256	10167	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-593	4491484.3_NODE_135	+	301	390	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-594	DLF006_scaffold44611_3	-	3121	3032	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-595	DLM005_scaffold21393_11	-	3900	3811	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-596	DLM023_scaffold10572_11	-	2355	2266	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-597	DOM017_scaffold16014_2	+	273	362	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-598	NLF005_scaffold12_6	+	428	517	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-599	NLM004_scaffold4711_1	+	328	417	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-600	SRS013687_Baylor_scaffold_4489	-	566	477	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-601	SRS015663_WUGC_scaffold_32361	-	261	172	RNA →
env-602	NOM001_scaffold9206_1	+	179	268	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-603	MA55A_contig00037	+	31742	31825	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-604	SRS015038_C1830604	-	183	101	RNA → hypo →
env-605	SRS024318_LANL_scaffold_48420	-	9783	9701	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rplF (PRK05498)Ribosomal_L6 (pfam00347) →
env-606	SRS019389_C2174016	+	64	146	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-607	SRS021496_Baylor_scaffold_61403	-	25384	25302	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rpl6 (CHL00140)rplF (PRK05498) →
env-608	SRS013705_Baylor_scaffold_10956	-	13141	13059	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rpl6 (CHL00140)rplF (PRK05498) →
env-609	SRS023926_Baylor_scaffold_57257	-	419	337	RNA → rpsJ (PRK00596)RpsJ (COG0051) →

env-610	SRS024081.LANL_scaffold_55960	-	2978	2896	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-611	SRS024355.C4308570	-	2975	2893	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-612	SRS051791.LANL_scaffold_39766	-	72601	72519	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rpl6 (CHL00140)rplF (PRK05498) →
env-613	SRS064774.LANL_scaffold_50591	-	419	337	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-614	SRS057539.LANL_scaffold_48920	-	2989	2907	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-615	Buccal_mucosa_LANL.C64980361	+	214	296	RNA →
env-616	SRS014573.WUGC_scaffold_39733	-	183	101	RNA →
env-617	SRS015272.WUGC_scaffold_20985	-	183	101	RNA →
env-618	SRS019219.C2770408	+	150	232	RNA →
env-619	SRS042131.C2238632	-	183	101	RNA →
env-620	SRS047210.C3290105	-	183	101	RNA →
env-621	SRS050244.C4357047	+	214	296	RNA →
env-622	SRS063193.C2703828	+	165	247	RNA →
env-623	SRS064329.C2690719	+	645	727	RNA →
env-624	SRS019607.C2625282	-	183	101	RNA → hypo →
env-625	SRS022143.WUGC_scaffold_66638	+	646	728	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-626	Palatine_Tonsils_LANL.C6217726	-	183	101	RNA →
env-627	SRS011140.C5100171	+	457	539	RNA →
env-628	SRS014470.C3659642	+	443	525	RNA →
env-629	SRS017120.Baylor_scaffold_61418	-	5322	5240	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) →
env-630	SRS018357.C3905527	+	512	594	RNA →
env-631	SRS053854.LANL_scaffold_37572	+	22349	22431	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rpl6 (CHL00140)rplF (PRK05498) →
env-632	SRS013836.Baylor_scaffold_6533	+	97	179	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) →
env-633	SRS016319.WUGC_scaffold_11309	-	183	101	RNA → hypo →
env-634	SRS019974.Baylor_scaffold_45226	-	1407	1325	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) →

env-635	SRS023352.LANL_scaffold_27433	+	419	501	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rpl6 (CHL00140)rplF (PRK05498) →
env-636	SRS024447.LANL_scaffold_44990	-	725	643	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpl3 (CHL00143)rplC (PRK00001) →
env-637	SRS014271.WUGC_scaffold_40283	-	1462	1380	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) →
env-638	SRS044486.C2103388	-	215	133	RNA → hypo →
env-639	SRS062544.LANL_scaffold_1604	-	9172	9090	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rpl6 (CHL00140)rplF (PRK05498) →
env-640	SRS016740.Baylor_scaffold_57697	-	4537	4455	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-641	SRS015941.WUGC_scaffold_60199	+	239	321	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rplF (PRK05498)Ribosomal_L6 (pfam00347) →
env-642	SRS020220.Baylor_scaffold_40425	-	4359	4277	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-643	SRS047219.WUGC_scaffold_10994	-	4404	4322	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-644	SRS017076.Baylor_scaffold_27856	+	239	321	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → hypo →
env-645	SRS017080.C1208674	+	239	321	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Jig-1-1	NZ_JH378829.1	-	294163	294077	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
env-646	DLF013_scaffold30742.5	+	295	384	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-647	ADJS01008642.1	-	6451	6362	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Eha-1-1	NZ_ACEP0100080.1	+	41279	41368	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpsJ (PRK00596)RpsJ (COG0051) →
env-648	SRS017521.Baylor_scaffold_8153	-	190	101	RNA → hypo →
env-649	DLM013_scaffold7335.7	-	2319	2230	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-650	scaffold2225.2_MH0044	-	1084	1004	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-651	NLM026_scaffold21820.1	+	21714	21794	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-652	NOF008_scaffold24903.1	+	21716	21796	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-653	DLF003_scaffold30405.2	+	3989	4069	RNA → rpsJ (PRK00596)RpsJ (COG0051) →

env-654	SRS022609_Baylor_scaffold_47809	+	2933	3028	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-655	scaffold48720_1_MH0045	-	185	90	RNA →
env-656	DLM014_scaffold11994_1	-	368	273	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-657	SRS052697_LANL_scaffold_39196	-	189	94	RNA →
env-658	DLF005_scaffold27951_2	-	1013	918	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-659	DOM024_scaffold33725_3	+	258	353	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-660	NLF013_scaffold5635_8	+	41902	41997	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-661	NLM029_scaffold14839_9	+	4602	4697	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-662	NOM005_scaffold28840_1	-	381	286	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-663	SRS063985_LANL_scaffold_18654	-	187	92	RNA →
env-664	scaffold9404_4_V1.CD-11	+	127	222	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-665	scaffold53060_1_V1.UC-6	-	185	90	RNA →
env-666	NOF008_scaffold7151_1	-	255	160	RNA →
env-667	SRS015578_WUGC_scaffold_23407	-	187	92	RNA →
env-668	NLF005_scaffold32939_3	-	346	251	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
Lba-14-1	NZ_KE159563.1	-	23368	23278	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
Bsp-1-1	NZ_ATVV01000009.1	-	54629	54531	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Bsp-9-1	NZ_KE384200.1	+	18003	18101	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-669	DLM009_scaffold18031_8	+	20467	20550	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-670	NOM005_scaffold39343_1	-	364	281	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-671	4491417.3_NODE_55002	-	8825	8742	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-672	4491410.3_NODE_36037	-	7413	7330	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-673	DLF014_scaffold5097_1	-	44435	44352	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-674	DLM016_scaffold2775_3	+	1842	1925	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-675	DLM018_scaffold25796_1	+	353	436	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-676	DOF008_scaffold2592_2	-	581	498	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-677	DOF012_scaffold5047_1	-	2352	2269	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-678	DOM013_scaffold30571_6	-	470	387	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-679	DOM026_scaffold10557_9	+	388	471	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-680	NLM032_scaffold1492_2	-	20482	20399	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-681	DOM018_scaffold445_3	+	1261	1344	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-682	NOM009_scaffold4295_7	+	387	470	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-683	4491413.3_NODE_68514	-	29126	29043	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-684	scaffold18238_14_MH0043	+	1123	1206	RNA →
env-685	UnmappedStool_Broad_scaffold_262642	-	940	857	RNA → ←-hypo
env-686	DOF008_scaffold62_1	-	1739	1645	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) →
env-687	DLM027_scaffold22199_1	-	5689	5595	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) →

env-688	NLM026_scaffold16599_8	+	3734	3828	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) →
env-689	NLM028_scaffold65_1	-	197	103	RNA →
env-690	NOF010_scaffold14875_3	-	4414	4320	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-691	SRS019161_WUGC_scaffold_28654	-	219	125	RNA →
env-692	DOM003_scaffold5836_16	+	259	353	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-693	NOM001_scaffold34192_1	-	968	874	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-694	longitudinal_441_49	+	131726	131820	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-695	DOF009_scaffold11200_9	+	419	513	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-696	longitudinal_21_17	-	22273	22179	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-697	longitudinal_22_137	-	2800	2706	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (PRK09374)Ribosomal_L2 (pfam00181) →
env-698	longitudinal_23_385	-	119360	119266	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-699	NOF014_scaffold54976_9	+	413	507	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) →
env-700	scaffold46017_3_MH0080	-	728	647	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-701	scaffold248_6_O2_UC-4	+	3853	3934	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-702	SRS014923_C3294507	-	94	13	RNA →
env-703	SRS015854_WUGC_scaffold_39634	-	93	12	RNA →
env-704	SRS050925_LANL_scaffold_33465	+	1412	1493	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Ceu-1-1	NZ_DS483526.1	+	154917	154998	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-705	scaffold4547_6_MH0003	+	12959	13044	RNA → rpsJ (PRK00596)RpsJ (COG0051) →

env-706	scaffold24806_1_MH0065	-	95	10	RNA →
env-707	scaffold15202_12_MH0075	+	1002	1087	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-708	NLM004_scaffold50332_5	+	702	787	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-709	scaffold7483_10_MH0050	+	16390	16475	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-710	scaffold3174_3_MH0086	-	410	325	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-711	SRS052697_C3345764	-	98	13	RNA →
env-712	scaffold516_22_MH0034	+	1362	1447	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-713	scaffold16883_4_MH0015	-	338	253	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-714	scaffold3437_5_MH0042	+	12155	12240	RNA →
env-715	scaffold32152_1_MH0052	+	799	884	RNA → hypo →
env-716	scaffold22830_6_MH0070	+	761	846	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-717	scaffold48922_1_V1_CD-8	-	2029	1944	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-718	4491403.3_NODE_590	-	17129	17044	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-719	SRS049164_C2339078	+	236	321	RNA → hypo →
env-720	NOM013_scaffold4188_8	+	111	196	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-721	SRS012273_Baylor_scaffold_27311	-	447	362	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-722	SRS014459_WUGC_scaffold_9463	-	179	94	RNA →
env-723	SRS015065_WUGC_scaffold_19845	-	225	140	RNA →
env-724	SRS047014_WUGC_scaffold_16737	+	1370	1455	RNA →
env-725	SRS063040_Baylor_scaffold_3708	-	1563	1478	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-726	scaffold19191_4_V1_UC-19	-	1168	1083	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-727	SRS017103_C2720120	+	2366	2451	RNA →
env-728	SRS024331_LANL_scaffold_46092	-	97	12	RNA →
env-729	scaffold4163_12_MH0063	+	2063	2148	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-730	DLM002_scaffold32671_L6	+	53527	53612	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-731	scaffold492_4_MH0046	+	3087	3172	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Rsp-1-1	NZ_HE978651.1	-	2542550	2542467	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → RNA → GTP_HydF (TIGR03918) →
env-732	4491479.3_NODE_8774	+	192531	192622	RNA →
Rgn-1-1	NZ_JAGQ01000004.1	+	1148637	1148728	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-733	ADJT01004649.1	+	81	172	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-734	DLM009_scaffold11270_2	+	1293	1384	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-735	DOF012_scaffold7759_1	+	2947	3038	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-736	longitudinal_230_114	-	55598	55507	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-737	longitudinal_231_54	-	203125	203034	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-738	longitudinal_232_15	-	49512	49421	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-739	4491482.3_NODE_3522	+	6776	6867	RNA →
env-740	NOM002_scaffold8624_14	-	161	70	RNA →
env-741	SRS042284_WUGC_scaffold_18018	-	166	75	RNA → hypo →
env-742	NOM026_scaffold565_8	+	1020	1111	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-743	longitudinal_525_50	+	31964	32055	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Rgn-2-1	NZ_KI669415.1	-	308806	308715	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Lba-4-1	NZ_GL945339.1	-	18152	18061	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-744	4491488.3_NODE_2135	-	11126	11035	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-745	DLM024_scaffold1675_1	+	6682	6773	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-746	DOM016_scaffold28471_1	-	579	488	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-747	NLM007_scaffold2834_3	+	4947	5038	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-748	NLM027_scaffold10047_1	-	61541	61450	RNA → rpsJ (PRK00596)RpsJ (COG0051) →

Dsp-1-1	NZ_KE159794.1	-	173058	172976	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-765	scaffold8116.4_MH0058	+	475	558	RNA →
env-766	UnmappedStool_Broad_scaffold_811588	+	1503	1586	RNA →
env-767	NOM005_scaffold16235_2	+	536	619	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-768	scaffold879.1_MH0020	-	181	98	RNA →
env-769	DOF003_scaffold12608_5	-	851	768	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-770	DLF014_scaffold3019.1	+	38181	38264	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-771	DLM004_scaffold2544.24	+	1613	1696	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-772	NLM002_scaffold11552_20	-	6524	6441	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-773	NLM007_scaffold8527_7	+	212	295	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-774	NOM009_scaffold43909.1	+	265	348	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-775	NOM028_scaffold32438.1	-	438	355	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-776	SRS019397_WUGC_scaffold.4193	-	413	330	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-777	DOM010_scaffold1445.8	+	1478	1561	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-778	longitudinal_13_538	-	50782	50698	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-779	longitudinal_14_60	-	50782	50698	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-780	longitudinal_15_97	-	50782	50698	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-781	longitudinal_40_24	-	50781	50697	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →

env-796	longitudinal_105_72	+	82106	82190	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-797	longitudinal_106_357	-	50784	50700	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rps19 (CHL00050)rpsS (PRK00357) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-798	longitudinal_107_17	+	13248	13332	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-799	longitudinal_108_5	+	13247	13331	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-800	longitudinal_109_7	+	13246	13330	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-801	longitudinal_110_299	+	82113	82197	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-802	NOF005_scaffold1985_8	+	1796	1880	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
env-803	NLM031_scaffold14783_14	-	386	302	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-804	NOM009_scaffold30082_1	-	211	127	RNA →
env-805	NOM026_scaffold8944_8	+	436	520	RNA →

Cco-1-1	NZ_GG662012.1	+	43704	43788	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → hypo → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → hypo → hypo → RplX (COG0198)ribosomal_L24 (pfam17136) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →</p>
env-806	longitudinal_291_432	-	4369	4285	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →</p>
env-807	longitudinal_292_65	-	59834	59750	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →</p>
env-808	longitudinal_293_123	+	13738	13822	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →</p>
env-809	longitudinal_294_16	-	140925	140841	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →</p>
env-810	longitudinal_344_234	+	686	770	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → RplB (COG0090)rplB (PRK09374) → rplB (PRK09374)Ribosomal_L2_C (pfam03947) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →</p>
env-811	longitudinal_345_116	-	4378	4294	<p>RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →</p>

env-812	longitudinal_133_22	+	48325	48409	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-813	longitudinal_186_6	+	48325	48409	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-814	longitudinal_295_1	-	44521	44440	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-815	longitudinal_296_205	-	4377	4296	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → KH (smart00322)RpsC (COG0092) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-816	longitudinal_297_58	-	44521	44440	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-817	longitudinal_298_873	+	4316	4397	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
Dfo-2-1	NZ_AAAXA02000012.1	-	139959	139878	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
Dfo-1-1	NZ_JH126494.1	-	105382	105301	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-818	longitudinal_421_71	+	42399	42480	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →

env-819	longitudinal_187_175	+	27495	27576	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-820	longitudinal_519_34	+	75799	75884	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cbo-6-1	NZ_DS480701.1	-	29789	29704	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cbo-1-1	NZ_KB851188.1	+	671984	672069	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cbo-5-1	NZ_KB851140.1	-	31903	31818	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cbo-4-1	NZ_KB851170.1	-	436154	436069	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
[bo-1-1	NZ_KQ235847.1	+	638432	638517	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
[ci-1-1	NZ_KQ235875.1	-	58399	58314	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Csp-5-1	NZ_JYHN01000073.1	+	12472	12557	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cci-1-1	NZ_JH376430.1	-	58181	58096	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-821	DOM008_scaffold5856_4	-	1719	1634	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-822	DLM024_scaffold3474_1	+	221	306	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-823	DOM022_scaffold7182_3	-	11175	11090	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cbo-2-1	NZ_KB851182.1	-	3727490	3727405	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cbo-3-1	NZ_KB851179.1	-	40006	39921	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cba-4-1	NZ_BAHU02000028.1	+	24715	24800	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cba-7-1	NZ_BAIK02000095.1	-	31314	31229	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-824	DLF007_scaffold1906_9	-	8119	8034	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-825	DOM005_scaffold2526_23	+	748	833	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cba-2-1	NZ_DS990264.1	+	173299	173384	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpsJ (PRK00596)RpsJ (COG0051) →
env-826	DOF010_scaffold27370_9	-	556	471	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Ccl-6-1	NZ_KB851048.1	-	152029	151944	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-827	BABA01014305.1	-	333	248	RNA →
Ccl-3-1	NZ_KB851058.1	-	172004	171919	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
Ccl-9-1	NZ_KB850936.1	+	2207674	2207759	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
Ccl-4-1	NZ_KB851076.1	+	62132	62217	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
Ccl-8-1	NZ_KB850966.1	+	1570893	1570978	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
Ccl-5-1	NZ_KB851039.1	+	308067	308152	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
Ccl-2-1	NZ_KB851121.1	-	453818	453733	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
Ccl-7-1	NZ_KB850990.1	-	33581	33496	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
[cl-1-1	NZ_KQ235916.1	-	65391	65306	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
Ccl-1-1	NZ_JH376872.1	+	684262	684347	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
Lba-16-1	NZ_KE159611.1	-	333481	333384	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Csp-3-1	NZ_KB822452.1	+	182613	182710	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-828	4491488.3_NODE_13653	-	1210	1116	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-829	DLM023_scaffold19875_8	+	194	288	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-830	NOF007_scaffold11968_1	+	314	408	RNA → hypo →
env-831	SRS017521_Baylor_scaffold_53704	-	166	72	RNA →
env-832	NLM015_scaffold7043_13	+	1676	1770	RNA → hypo →
env-833	4491420.3_NODE_1923	-	275	181	RNA →
env-834	DOM022_scaffold13753_3	-	1709	1615	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) →
env-835	NLM006_scaffold4964_7	+	3718	3812	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-836	NLM031_scaffold4829_11	+	921	1015	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) →

Rto-1-1	NZ_DS264365.1	-	34936	34842	RNA → hypo →
env-837	4491479.3_NODE_8774	+	203259	203353	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → rpsC (PRK00310)30S_S3_KH (cd02412) →
env-838	SRS022713_LANL_scaffold_9359	-	1239	1145	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-839	DLM021_scaffold9512.3	+	55	149	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-840	SRS014923_WUGC_scaffold_52186	+	3683	3777	RNA →
Lba-1-1	NZ_GL945299.1	-	131629	131535	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
Lba-11-1	NZ_GL622455.1	+	63318	63412	rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-841	DOM008_scaffold11099.2	+	379	473	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Lba-7-1	NZ_GL890521.1	-	333856	333762	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-842	4448814.3_Contig31048	+	343	437	RNA → hypo →
env-843	DLF009_scaffold139_11	-	490	383	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-844	UnmappedStool_Broad_scaffold_696739	-	332	252	RNA → hypo →
env-845	4491413.3_NODE_28238	-	28876	28796	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-846	4491423.3_NODE_19525	-	4056	3976	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-847	SRS052697_LANL_scaffold_18998	-	390	310	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-848	NLF013_scaffold9702_5	-	1227	1147	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-849	NLF009_scaffold47128_2	+	415	495	RNA →
env-850	scaffold72408_1_MH0058	-	228	148	RNA → hypo →
env-851	scaffold14894_1_MH0014	-	249	168	RNA →
env-852	SRS015217_WUGC_scaffold_12868	+	2064	2145	RNA →
env-853	DLM008_scaffold14278_10	-	4516	4435	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-854	UnmappedStool_Broad_scaffold_412435	-	349	268	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-855	DOM019_C726307_1	-	271	190	RNA →
env-856	4491417.3_NODE_36334	+	887	968	RNA →
env-857	DLM028_scaffold37057_1_2	-	716	635	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-858	NLM031_scaffold55673_5	+	29666	29747	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-859	NOF013_scaffold6414_30	+	2033	2114	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-860	longitudinal_438_77	-	42376	42295	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Rho-1-1	NC_015977.1	-	3143074	3142993	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-861	NLM026_scaffold36927_9	-	437	356	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →

env-862	SRS049164.WUGC_scaffold_63181	-	252	171	RNA → ←-hypo
env-863	DLF012_scaffold4039_3	+	4877	4957	RNA → rpsJ (PRK00596)RpsJ (COG0051)→
env-864	SRS050422.LANL_scaffold_15527	-	181	101	RNA →
env-865	4491485.3.NODE.8452	-	8128	8047	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-866	DOM010_scaffold114_1	+	76895	76976	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-867	NLF010_scaffold280_62	+	221	302	RNA → rpsJ (PRK00596)RpsJ (COG0051)→
env-868	scaffold6333_2.O2.UC-11	+	2568	2649	RNA → rpsJ (PRK00596)Ribosomal.S10 (pfam00338)→
env-869	SRS014923.WUGC_scaffold_21701	-	206	125	RNA →
env-870	SRS048164.WUGC_scaffold_6926	-	364	283	RNA → rpsJ (PRK00596)Ribosomal.S10 (pfam00338)→
env-871	SRS053398.LANL_scaffold_19345	-	207	126	RNA → hypo→
env-872	SRS024331.LANL_scaffold_6342	-	361	280	RNA → rpsJ (PRK00596)Ribosomal.S10 (pfam00338)→
env-873	SRS042628.WUGC_scaffold_13655	-	207	126	RNA →
env-874	4491413.3.NODE_36320	+	36281	36362	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-875	SRS049164.WUGC_scaffold_48687	+	416	497	RNA → hypo→
env-876	SRS047014.WUGC_scaffold_33266	-	207	126	RNA →
env-877	DOF014_scaffold33897_7	+	141	222	RNA → rpsJ (PRK00596)Ribosomal.S10 (pfam00338)→
env-878	DOM024_scaffold8082_9	+	242	323	RNA → rpsJ (PRK00596)RpsJ (COG0051)→
env-879	SRS058770.LANL_scaffold_8927	-	361	280	RNA → rpsJ (PRK00596)Ribosomal.S10 (pfam00338)→
env-880	4491403.3.NODE_43191	-	1209	1128	RNA → rpsJ (PRK00596)Ribosomal.S10 (pfam00338)→
env-881	4491404.3.NODE_39204	+	16	97	RNA → rpsJ (PRK00596)RpsJ (COG0051)→
env-882	DLM015_scaffold18244_10	+	1214	1295	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-883	DLM021_scaffold23002_4	-	9326	9245	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-884	DOF011_scaffold5789_15	+	252	333	RNA → rpsJ (PRK00596)Ribosomal.S10 (pfam00338)→
env-885	DOM021_scaffold13341_7	+	164	245	RNA → rpsJ (PRK00596)RpsJ (COG0051)→
env-886	NLM008_scaffold17065_3	-	3947	3866	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-887	NLM009_scaffold5386_5	+	2122	2203	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-888	NLM021_scaffold13120_8	+	3360	3441	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-889	NOM020_scaffold2140_8	-	6244	6163	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-890	NOM025_scaffold13467_1	-	49759	49678	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-891	NOM029_scaffold63_2	-	3400	3319	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-892	4491419.3.NODE_20619	+	4027	4108	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-893	DLM028_scaffold2088_3	-	11513	11432	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-894	NLM004_scaffold4826_13	+	1805	1886	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-895	NLM032_scaffold6862_1	+	3653	3734	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-896	NOF006_scaffold7748_15	+	408	489	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-897	NOF007_scaffold4503_1	+	37612	37693	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-898	DOM022_scaffold52_3	-	38941	38860	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-899	NOM002_scaffold8686_2	+	209	290	RNA → rpsJ (PRK00596)RpsJ (COG0051)→
env-900	SRS015264.WUGC_scaffold_25881	-	207	126	RNA →
env-901	scaffold2311_1.V1.UC-21	-	204	123	RNA →
env-902	4491420.3.NODE_8720	+	93	174	RNA →
env-903	DLM020_scaffold4730_1	-	107388	107307	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-904	DOM018_scaffold13457_5	-	1831	1750	RNA → rpsJ (PRK00596)RpsJ (COG0051)→
env-905	NOM007_scaffold35894_2	-	1318	1237	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-906	NOM022_scaffold18782_6	+	4188	4269	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
Rin-2-1	NZ_ACFY01000086.1	+	87520	87601	RNA → rpsJ (PRK00596)RpsJ (COG0051)→ rpsJ (PRK00596)RpsJ (COG0051)→
env-907	scaffold2088_3.MH0067	+	748	829	RNA → rpsJ (PRK00596)Ribosomal.S10 (pfam00338)→
env-908	scaffold3368_5.V1.UC-7	-	182	101	RNA →
env-909	DLM002_scaffold8503_15	+	532	613	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-910	DOM017_scaffold4879_3	+	2589	2670	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-911	NOM014_scaffold11459_3	-	4961	4880	RNA → hypo→ rpsJ (PRK00596)RpsJ (COG0051)→
env-912	SRS064276.LANL_scaffold_12898	-	359	278	RNA → rpsJ (PRK00596)Ribosomal.S10 (pfam00338)→

env-913	NLF013_scaffold11235_2	+	33240	33321	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-914	NOM026_scaffold13266_5	-	2455	2374	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-915	NOM018_C815838_1	-	251	170	RNA →
env-916	NLF002_scaffold7830_8	+	14588	14669	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-917	NOF014_scaffold631_2	-	1554	1473	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-918	longitudinal_461_56	+	96014	96096	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-919	longitudinal_462_123	+	96021	96103	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-920	longitudinal_463_7	+	96041	96123	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Lba-10-1	NZ_GL945245.1	-	74466	74384	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rpl6 (CHL00140)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) →
[sc-1-1	NZ_BAHS01000033.1	+	7765	7847	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-921	DLF012_scaffold283_15	+	2596	2678	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-922	longitudinal_337_87	+	26835	26917	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rpl6 (CHL00140)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) →
env-923	longitudinal_522_1406	+	359	441	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Csc-1-1	NZ_DS499705.1	-	73976	73894	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → rpl6 (CHL00140)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → rplR (PRK05593)Ribosomal_L18_L5e (cd00432) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → RplO (COG0200)rplO (PRK05592) → SecY (COG0201)secY (PRK09204) →
Cba-6-1	NZ_BAII02000008.1	+	178284	178366	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Bhy-1-1	NZ_GG657686.1	+	266696	266777	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
env-924	4491487.3.NODE_119164	+	6041	6130	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-925	NOM010_scaffold888_13	-	262	173	RNA →
env-926	NLF007_scaffold25078_17	-	2019	1930	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-927	NLM021_scaffold5854_5	+	3094	3183	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Bcr-1-1	NZ_GG663523.1	-	84988	84909	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpsJ (PRK00596)RpsJ (COG0051) →
env-928	4491405.3.NODE_49	+	11944	12023	RNA → rpsJ (PRK00596)RpsJ (COG0051) →

env-929	SRS019582.WUGC_scaffold_37983	+	23645	23724	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
env-930	4491410.3.NODE_58360	+	14037	14116	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-931	4491484.3.NODE_3245	-	8920	8841	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-932	scaffold20211_2.MH0025	-	397	318	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-933	4491414.3.NODE_1471	-	1688	1609	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-934	NLM022_scaffold29854_2	+	26081	26161	RNA →
env-935	4491402.3.NODE_2732	-	220150	220070	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-936	4491419.3.NODE_5150	-	3952	3872	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-937	NLM010_scaffold20898_13	-	1810	1730	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-938	SRS013158_Baylor_scaffold.11109	-	287	207	RNA → hypo →
env-939	SRS015264.WUGC_scaffold_37105	+	430	510	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-940	NLM004_scaffold7074_5	+	549	629	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-941	SRS043701.LANL_scaffold_8835	+	329	409	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-942	scaffold16680_3.MH0011	+	648	728	RNA → hypo →
env-943	NLF005_scaffold18267_1	+	154	234	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-944	NOM009_scaffold7774_6	-	20905	20825	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-945	DOM003_scaffold19611_1	+	136	216	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-946	NLF013_scaffold11475_6	+	661	741	RNA →
env-947	SRS015960.WUGC_scaffold_7480	+	329	409	RNA →
env-948	SRS056519.LANL_scaffold_9865	-	288	208	RNA →
env-949	NOM002_scaffold7458_1	+	147	227	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-950	SRS022137.WUGC_scaffold_40873	-	287	207	RNA → hypo →
Rin-1-1	NZ_GG692728.1	-	64665	64585	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpsJ (PRK00596)RpsJ (COG0051) →
env-951	4491485.3.NODE_16391	+	24197	24277	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-952	SRS019397.WUGC_scaffold_6745	+	328	408	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-953	NOF005_scaffold5963_8	-	1692	1612	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-954	SRS043411.WUGC_scaffold_12982	-	288	208	RNA → hypo →
env-955	4491421.3.NODE_11491	+	13278	13358	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-956	NOM022_scaffold14723_28	-	3683	3603	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-957	NOM027_scaffold11125_1	-	446	366	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-958	SRS014287.WUGC_scaffold_12600	-	819	739	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-959	NOM002_scaffold929_13	+	1149	1229	RNA → ← hypo
env-960	RUMENNODE_4338772_1	-	19974	19892	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) → rplD (PRK05319)Ribosomal_L4 (pfam00573) →
env-961	RUMENNODE_2488056_1	-	20859	20777	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) →
env-962	SRS014923.WUGC_scaffold_57720	-	163	82	RNA →
env-963	scaffold7909_1.MH0081	-	174	93	RNA →
env-964	4491408.3.NODE_8011	-	1352	1271	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplC (COG0087)rplC (PRK00001) →
env-965	IMNBL1_c0000852	+	20500	20581	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-966	JGI994J12354_10001434	-	3364	3283	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-967	2227244666	+	3836	3917	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-968	BABG01010268.1	-	446	363	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-969	scaffold33008_3.MH0030	+	784	867	RNA →
env-970	scaffold7906_1.V1.CD-1	-	885	802	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-971	DLM023_scaffold1754_17	-	606	523	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-972	4491421.3.NODE_79900	+	381	464	RNA →
env-973	scaffold17933_1.MH0058	-	182	99	RNA →
env-974	scaffold9942_8.MH0073	+	2179	2262	RNA →
env-975	scaffold7106_1.MH0074	-	181	98	RNA →
env-976	scaffold6425_1.V1.UC-7	-	182	99	RNA →

env-977	DOF003_scaffold16512.6	+	311	394	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-978	DOM016_scaffold3915.5	+	242	325	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-979	NOM002_scaffold75.3	+	434	517	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Lba-3-1	NZ_KE150017.1	-	1738715	1738634	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-980	SRS057717_LANL_scaffold.6546	-	2301	2220	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-981	4491482.3_NODE.12049	-	97	16	RNA →
env-982	NLM027_scaffold19893.2	-	681	600	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cne-1-1	NZ_DS995339.4	+	431934	432015	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-983	DOM008_scaffold9546.12	-	4435	4354	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-984	DOF006_scaffold10319.1	-	1987	1906	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) →
env-985	DOF006_scaffold1788.9	+	437	518	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
Csp-8-1	NZ_KE150443.1	+	282818	282899	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-986	DLF012_scaffold17148.1	-	413	332	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Csp-9-1	NZ_KE150436.1	+	356160	356241	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-987	NLM027_scaffold221.5	+	1755	1836	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-988	NOM028_scaffold23473.1	-	499	418	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-989	longitudinal_520_20	-	28469	28388	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →

env-990	longitudinal_521_5	-	28425	28344	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
Lba-9-1	NZ_GL872351.1	-	28391	28310	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
Lba-12-1	NZ_GL890574.1	-	28756	28675	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-991	longitudinal_114_32	-	33692	33610	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-992	longitudinal_113_28	-	46667	46585	rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-993	SRS015782_WUGC_scaffold_40849	+	1056	1138	RNA → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
Dlo-2-1	NZ_DS264399.1	+	26108	26190	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-994	NOM009_scaffold172_2	+	629	711	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-995	4491421.3_NODE_115793	+	3592	3674	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpl2 (CHL00052)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (PRK00310)30S_S3_KH (cd02412) →
env-996	4491417.3_NODE_2013	-	1426	1344	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) →

env-997	longitudinal_68_67	+	35973	36055	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-998	longitudinal_299_23	-	39606	39524	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) →
env-999	longitudinal_300_84	-	39927	39845	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1000	longitudinal_301_117	-	4335	4253	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → KH (smart00322)RpsC (COG0092) →
env-1001	longitudinal_302_50	+	39748	39830	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1002	longitudinal_346_79	+	7051	7133	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1003	longitudinal_347_101	-	67359	67277	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1004	AUXO010955118.1	+	38874	38956	RNA →
env-1005	ADJS01006814.1	+	10307	10389	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-1006	NOM029_scaffold8422.1	-	172	90	RNA → hypo →

env-1007	NLM027_scaffold13626_5	-	7795	7713	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1008	DLF013_scaffold33304_1	-	365	283	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-1009	DLM009_scaffold5025_4	+	9759	9841	RNA → hypo →
env-1010	longitudinal_134_7	+	55196	55278	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1011	longitudinal_135_8	-	44719	44637	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1012	longitudinal_188_28	+	55196	55278	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1013	longitudinal_189_5	-	44722	44640	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1014	longitudinal_190_130	+	55195	55277	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →

env-1015	longitudinal_465_52	+	39026	39108	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1016	longitudinal_466_3	-	45264	45182	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → hypo → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1017	longitudinal_467_77	+	39024	39106	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1018	DLM012_scaffold1652_10	+	412	494	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-1019	longitudinal_464_28	+	39026	39108	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
Dlo-1-1	NZ_KE384171.1	-	53064	52982	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) →
env-1020	DLM008_scaffold98_16	-	4788	4708	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1021	4491403.3_NODE_90116	-	1091	1011	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1022	4491482.3_NODE_33763	+	29992	30072	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Lba-2-1	NZ_GL945165.1	-	181718	181624	RNA → hypo → rpsJ (PRK00596)RpsJ (COG0051) →
env-1023	NLF005_scaffold8054_23	-	240	156	RNA →
env-1024	scaffold48677_1_MH0016	-	226	142	RNA → hypo →
env-1025	SRS052697_LANL_scaffold_40762	-	228	144	RNA →
env-1026	NOF014_scaffold21218.7	+	6081	6165	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → RplD (COG0088)rplD (PRK05319) →
env-1027	UnmappedStool_Broad_scaffold_56426	+	442	526	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpl3 (CHL00143)rplC (PRK00001) →

env-1028	NOM007_scaffold46220_1	+	6092	6176	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_L17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) →
env-1029	SRS015065_WUGC_scaffold_21436	-	228	144	RNA →
env-1030	scaffold8950_1_MH0020	-	182	100	RNA →
env-1031	scaffold13706_1_MH0082	-	182	100	RNA →
env-1032	NLM023_scaffold21939_3	+	42	124	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1033	NOF005_scaffold41945_3	-	3030	2948	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1034	scaffold14387_1_O2.UC-20	-	183	101	RNA →
env-1035	NLM005_scaffold29532_3	-	939	859	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1036	SRS014979_WUGC_scaffold_17094	-	219	139	RNA →
env-1037	SRS015854_WUGC_scaffold_21352	-	218	138	RNA → hypo →
env-1038	scaffold11729_1_MH0046	-	176	96	RNA →
env-1039	4491404.3_NODE_80547	+	4100	4180	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1040	NLF012_scaffold34222_1	+	9882	9962	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1041	SRS014613_WUGC_scaffold_19279	-	219	139	RNA →
env-1042	SRS015663_WUGC_scaffold_14486	-	205	125	RNA →
env-1043	scaffold3356_1_MH0020	-	178	98	RNA →
env-1044	scaffold41365_1_MH0048	-	215	135	RNA → hypo →
env-1045	DOM018_scaffold286_1	-	8103	8023	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1046	scaffold5676_2_MH0030	+	2969	3049	RNA →
env-1047	NOM018_scaffold537_4	+	242	322	RNA →
env-1048	ADJS01018011.1	-	102	22	RNA →
env-1049	SRS012273_Baylor_scaffold_16633	-	217	137	RNA →
env-1050	SRS051031_LANL_scaffold_29286	-	205	125	RNA →
env-1051	SRS052027_LANL_scaffold_5017	-	180	100	RNA →
env-1052	SRS015578_WUGC_scaffold_20977	-	205	125	RNA →
env-1053	SRS058723_Baylor_scaffold_8787	-	220	140	RNA →
env-1054	scaffold5589_1_V1.CD-15	-	176	96	RNA →
env-1055	DLF006_scaffold6164_6	-	332	252	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1056	SRS011271_WUGC_scaffold_13792	-	203	123	RNA →
env-1057	SRS015133_WUGC_scaffold_22071	-	217	137	RNA →
env-1058	SRS050925_LANL_scaffold_18487	-	178	98	RNA →
env-1059	4491423.3_NODE_31871	+	887	967	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1060	DLM007_scaffold22614_6	+	347	427	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1061	DLM013_scaffold20638_2	-	589	509	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1062	DOM026_scaffold2783_5	-	1389	1309	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1063	NLM029_scaffold10879_6	+	10181	10261	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1064	NOM029_scaffold77_3	-	6632	6552	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cha-1-1	NZ_KB850952.1	-	266489	266409	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1065	BABF01000827.1	+	5585	5665	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Hha-2-1	NZ_BAHY01000041.1	+	46269	46349	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Hha-1-1	NZ_BAHR02000176.1	+	17953	18033	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1066	DLM024_scaffold447_12	-	10332	10252	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cba-1-1	NZ_CCYG01000030.1	-	17670	17589	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cba-8-1	NZ_BAIL02000037.1	+	5849	5930	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1067	DLM003_scaffold37465_3	-	449	368	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
Lba-21-1	NZ_BAIG01000037.1	-	23850	23769	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Lba-20-1	NZ_BAHZ01000017.1	+	31717	31798	RNA → rpsJ (PRK00596)RpsJ (COG0051) →

Lba-8-1	NZ_KE150406.1	-	356926	356845	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1068	DLM022_scaffold65033.2	-	21810	21729	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Lba-13-1	NZ_KE159636.1	+	315368	315449	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Csp-7-1	NZ_GG730310.1	-	511953	511870	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1069	NOM014_scaffold12257_6	+	214	297	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1070	4448815.3_Contig39759	-	335	252	RNA → ←-hypo
env-1071	NOM004_scaffold1071_29	+	1697	1780	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1072	4448817.3_Contig41879	+	547	630	RNA →
Esp-1-1	NZ_KE159567.1	+	201686	201769	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1073	SRS014459_WUGC_scaffold_29318	-	183	101	RNA →
env-1074	scaffold8733.1_MH0068	-	181	99	RNA →
env-1075	4448812.3_Contig6350	+	105	187	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
Csa-1-1	NC_014376.1	-	4065824	4065743	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1076	4491413.3_NODE_8993	-	365	282	RNA →
env-1077	4491487.3_NODE_55596	-	1190	1107	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1078	DLF014_scaffold222_7	+	23771	23854	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1079	NOF002_scaffold1633_2	-	30591	30508	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1080	NOM002_scaffold7212_2	-	50398	50315	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1081	NOM016_scaffold10985_7	+	832	915	RNA →
env-1082	SRS049164_WUGC_scaffold_55041	-	222	139	RNA →
env-1083	DOM012_scaffold51_17	-	3319	3236	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1084	DLM002_scaffold16134_2.1	-	304	221	RNA →
env-1085	NOM017_scaffold25392_1	+	61	144	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1086	BABD01036607.1	-	431	348	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
Cha-2-1	NZ_JH379029.1	-	49852	49771	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Lba-5-1	NZ_KE159571.1	+	661657	661740	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Csp-1-1	NZ_JH376516.1	-	458908	458824	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1087	DLM024_scaffold3420_12	-	30123	30039	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Csy-3-1	NZ_GL834357.1	+	437513	437597	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Csy-2-1	NZ_GL834305.1	-	526475	526391	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Csy-1-1	NZ_KE992799.1	+	25413	25497	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cba-5-1	NZ_BAID02000107.1	-	26962	26878	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1088	RUMENNODE.4202514.70000	-	73558	73476	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
env-1089	SRS013818_Baylor_scaffold_51548	+	1200	1282	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpl3 (CHL00143)rplC (PRK00001) →
env-1090	SRS024580_C3065196	+	214	296	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpl3 (CHL00143)rplC (PRK00001) →
env-1091	SRS049389_WUGC_scaffold_44677	+	1748	1830	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-1092	SRS051791_LANL_scaffold_6364	-	2179	2097	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
env-1093	SRS014689_WUGC_scaffold_23083	+	95	177	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-1094	SRS015434_C5946977	+	1744	1826	RNA →
env-1095	SRS016342_Baylor_scaffold_32993	+	182	264	RNA →

env-1096	SRS019022.WUGC_scaffold_7226	-	36273	36191	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → rplO (PRK05592)Ribosomal_L27A (pfam00828) → SecY (COG0201)secY (PRK09204) →
env-1097	SRS019894.C3850908	-	182	100	RNA →
env-1098	SRS064774.C2746908	-	188	106	RNA →
env-1099	SRS022719.LANL_scaffold_10343	+	154	236	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-1100	SRS057692.C2605374	-	221	139	RNA → hypo →
Slo-1-1	NZ_JH590862.1	-	265923	265841	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → rplO (PRK05592)Ribosomal_L27A (pfam00828) → SecY (COG0201)secY (PRK09204) →
env-1101	SRS018443.C3867499	+	1133	1215	RNA → hypo →
env-1102	SRS013879.C2852050	-	221	139	RNA →
env-1103	SRS015644.WUGC_scaffold_48522	-	920	838	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpl3 (CHL00143)rplC (PRK00001) →
env-1104	SRS019219.WUGC_scaffold_28960	-	350	268	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-1105	SRS019974.C3184997	+	119	201	RNA →
env-1106	SRS053854.LANL_scaffold_31660	+	1073	1155	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →
env-1107	Palatine_Tonsils.LANL_scaffold_37420	+	240	322	RNA →
env-1108	SRS016740.Baylor_scaffold_70786	+	1203	1285	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-1109	SRS011306.Baylor_scaffold_89066	+	1041	1123	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-1110	SRS015209.WUGC_scaffold_4051	-	58388	58306	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → rplO (PRK05592)Ribosomal_L27A (pfam00828) → SecY (COG0201)secY (PRK09204) →

env-1111	SRS016037_WUGC_scaffold_42187	+	1374	1456	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → rplO (PRK05592)Ribosomal_L27A (pfam00828) → SecY (COG0201)secY (PRK09204) → adk (PRK00279)ADK (cd01428) → PRK05716 (PRK05716)MetAP1 (cd01086) →
env-1112	SRS019127_C1647535	-	881	799	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpl3 (CHL00143)rplC (PRK00001) →
env-1113	SRS021496_Baylor_scaffold_1948	-	18954	18872	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → rplO (PRK05592)Ribosomal_L27A (pfam00828) → SecY (COG0201)secY (PRK09204) →
env-1114	SRS056622_LANL_scaffold_50730	-	38763	38681	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → rplO (PRK05592)Ribosomal_L27A (pfam00828) → SecY (COG0201)secY (PRK09204) →
env-1115	SRS012279_Baylor_scaffold_39424	+	2148	2230	RNA →
env-1116	SRS022077_C2487593	+	355	437	RNA →
env-1117	SRS044662_C1603794	-	231	149	RNA → hypo →
env-1118	SRS014124_C2616663	-	366	284	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-1119	SRS019045_WUGC_scaffold_27984	-	12270	12188	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → rplO (PRK05592)Ribosomal_L27A (pfam00828) → SecY (COG0201)secY (PRK09204) →
env-1120	SRS022621_Baylor_scaffold_71993	-	649	567	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1121	SRS023617_Baylor_scaffold_75006	+	4288	4370	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-1122	SRS055426_LANL_scaffold_56046	+	434	516	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) →

env-1123	SRS015038_WUGC_scaffold_27865	-	2521	2439	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) →
env-1124	Buccal_mucosa_LANL_scaffold_1634	+	150	232	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1125	SRS014888_C3099341	-	199	117	RNA →
env-1126	SRS015762_WUGC_scaffold_42481	+	1202	1284	RNA →
env-1127	SRS015797_C2554923	+	273	355	RNA →
env-1128	SRS016569_C2502716	+	1756	1838	RNA →
env-1129	SRS017808_C3738277	+	135	217	RNA →
env-1130	SRS018300_Baylor_scaffold_24096	+	192	274	RNA →
env-1131	SRS018439_C2357059	+	501	583	RNA →
env-1132	SRS018739_C3682509	+	1199	1281	RNA →
env-1133	SRS019122_C5774298	-	198	116	RNA → ←-hypo
env-1134	SRS019126_C2113536	-	241	159	RNA →
env-1135	SRS019327_WUGC_scaffold_22335	-	366	284	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-1136	SRS020856_C2575490	+	380	462	RNA →
env-1137	SRS022530_C2080540	+	216	298	RNA →
env-1138	SRS023926_Baylor_scaffold_581	-	11958	11876	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_L17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → RplX (COG0198)rplX (PRK00004) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → rplO (PRK05592)Ribosomal_L27A (pfam00828) → SecY (COG0201)secY (PRK09204) →
env-1139	SRS024081_C2509738	+	250	332	RNA →
env-1140	SRS024138_C2606537	+	134	216	RNA →
env-1141	SRS024441_LANL_scaffold_49596	+	1744	1826	RNA →
env-1142	SRS050244_LANL_scaffold_51697	-	366	284	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-1143	SRS053603_LANL_scaffold_24802	+	1364	1446	RNA →
env-1144	SRS057355_C2349863	+	1129	1211	RNA →
env-1145	SRS017439_C3682793	-	198	116	RNA → hypo →
env-1146	SRS013705_Baylor_scaffold_81679	-	1216	1134	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) →
env-1147	SRS020220_C3614164	+	875	957	RNA →
env-1148	SRS050669_LANL_scaffold_67916	-	1577	1495	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) →
env-1149	SRS058336_LANL_scaffold_62543	+	1752	1834	RNA →
env-1150	SRS011086_WUGC_scaffold_38837	+	190	272	RNA → rpsJ (PRK00596)RpsJ (COG0051) → rpl3 (CHL00143)rplC (PRK00001) →
env-1151	SRS011140_C5153003	+	1201	1283	RNA →
env-1152	SRS057539_C2728969	+	1202	1284	RNA →
env-1153	SRS063288_C2538166	-	197	115	RNA →
env-1154	SRS015395_C2397760	+	1066	1148	RNA →
env-1155	SRS016002_WUGC_scaffold_44691	-	188	106	RNA →
env-1156	SRS019607_C2614074	-	188	106	RNA →
env-1157	SRS022536_LANL_scaffold_76935	+	51	133	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
env-1158	SRS057791_LANL_scaffold_81273	-	188	106	RNA →
env-1159	SRS043239_WUGC_scaffold_35420	+	57	139	RNA → rpsJ (PRK00596)Ribosomal_S10 (pfam00338) →
Csp-2-1	NZ_KB822565.1	-	883766	883673	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1160	DLM023_scaffold38722_2	+	555	632	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1161	NOM002_scaffold32230_2	-	52228	52151	RNA → rpsJ (PRK00596)RpsJ (COG0051) →

env-1162	DLF014_scaffold7481_2	-	97485	97408	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1163	scaffold1445_7_MH0020	-	5388	5311	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1164	C6522713_1_V1.UC-10	-	407	330	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1165	SRS024331_C2252267	-	502	425	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1166	scaffold50700_6_MH0006	+	13941	14018	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1167	JGI994J12354_10000791	+	2007	2104	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) →
env-1168	IMNBL1_c0000388	+	10662	10755	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)RpsS (COG0185) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → rpsQ (PRK05610)Ribosomal_S17 (pfam00366) → rplN (PRK05483)Ribosomal_L14 (pfam00238) →
env-1169	JGI994J12354_10000720	-	21163	21067	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1170	2227476835	-	442	346	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1171	IMNBL1_c0000272	+	15388	15484	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1172	SRS014459_WUGC_scaffold_61552	-	3023	2929	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1173	scaffold26742_2_MH0080	-	219	125	RNA →
env-1174	DLM023_scaffold12761_3	+	988	1082	RNA →
env-1175	SRS015217_WUGC_scaffold_38672	-	2002	1908	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
env-1176	SRS015264_WUGC_scaffold_39672	-	16092	15998	RNA → rpsJ (PRK00596)RpsJ (COG0051) →
Cle-1-1	NC_015275.1	-	3861759	3861678	RNA → rpsJ (PRK00596)RpsJ (COG0051) → RplC (COG0087)rplC (PRK00001) → rplD (PRK05319)Ribosomal_L4 (pfam00573) → rplW (PRK05738)Ribosomal_L23 (pfam00276) → RplB (COG0090)rplB (PRK09374) → rpsS (PRK00357)Ribosomal_S19 (pfam00203) → rplV (PRK00565)Ribosomal_L22 (pfam00237) → RpsC (COG0092)rpsC (PRK00310) → rpl16 (CHL00044)rplP (PRK09203) → PRK00306 (PRK00306)Ribosomal_L29 (pfam00831) → RpsQ (COG0186)rpsQ (PRK05610) → rplN (PRK05483)Ribosomal_L14 (pfam00238) → rplX (PRK00004)KOW_RPL26 (cd06089) → rplE (PRK00010)RplE (COG0094) → rpsN (PRK08061)RpsN (COG0199) → rpsH (PRK00136)Ribosomal_S8 (pfam00410) → RplF (COG0097)rplF (PRK05498) → rplR (PRK05593)Ribosomal_L18p (pfam00861) → RpsE (COG0098)rpsE (PRK00550) → Ribosomal_L30 (cd01658)rpmD (PRK05611) → rplO (PRK05592)Ribosomal_L27A (pfam00828) → SecY (COG0201)secY (PRK09204) →

19.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 19.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one S10-

- cd00432** (1) Ribosomal L18/L5e: L18 (L5e) is a ribosomal protein found in the central protuberance (CP) of the large subunit.
cd01086 (5) Methionine Aminopeptidase 1.
cd01428 (2) Adenylate kinase (ADK) catalyzes the reversible phosphoryl transfer from adenosine triphosphates (ATP) to adenosine monophosphates (AMP) and to yield adenosine diphosphates (ADP).
cd01658 (25) Ribosomal protein L30, which is found in eukaryotes and prokaryotes but not in

Clostridia RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 19.2.

- archaea, is one of the smallest ribosomal proteins with a molecular mass of about 7kDa.
cd02412 (2) K homology RNA-binding (KH) domain of the prokaryotic 30S small ribosomal subunit protein S3.
cd04451 (4) S1_IF1: Translation Initiation Factor IF1, S1-like RNA-binding domain.
cd06088 (1) KOW motif of Ribosomal Protein L14.
cd06089 (3) KOW motif of Ribosomal Protein L26.
CHL00022 (135) ribosomal protein L16
CHL00050 (2) ribosomal protein S19

- CHL00052** (1) ribosomal protein L2
CHL00140 (11) ribosomal protein L6; Validated
CHL00143 (11) ribosomal protein L3; Validated
COG0051 (841) Ribosomal protein S10 [Translation, ribosomal structure and biogenesis]
COG0087 (263) Ribosomal protein L3 [Translation, ribosomal structure and biogenesis]
COG0088 (14) Ribosomal protein L4 [Translation, ribosomal structure and biogenesis]
COG0090 (179) Ribosomal protein L2 [Translation, ribosomal structure and biogenesis]
COG0092 (144) Ribosomal protein S3 [Translation, ribosomal structure and biogenesis]
COG0094 (127) Ribosomal protein L5 [Translation, ribosomal structure and biogenesis]
COG0097 (22) Ribosomal protein L6P/L9E [Translation, ribosomal structure and biogenesis]
COG0098 (26) Ribosomal protein S5 [Translation, ribosomal structure and biogenesis]
COG0099 (4) Ribosomal protein S13 [Translation, ribosomal structure and biogenesis]
COG0100 (4) Ribosomal protein S11 [Translation, ribosomal structure and biogenesis]
COG0185 (128) Ribosomal protein S19 [Translation, ribosomal structure and biogenesis]
COG0186 (1) Ribosomal protein S17 [Translation, ribosomal structure and biogenesis]
COG0198 (123) Ribosomal protein L24 [Translation, ribosomal structure and biogenesis]
COG0199 (124) Ribosomal protein S14 [Translation, ribosomal structure and biogenesis]
COG0200 (15) Ribosomal protein L15 [Translation, ribosomal structure and biogenesis]
COG0201 (25) Preprotein translocase subunit SecY [Intracellular trafficking, secretion, and vesicular transport]
COG0202 (2) DNA-directed RNA polymerase, alpha subunit/40 kD subunit [Transcription]
COG0522 (2) Ribosomal protein S4 or related protein [Translation, ribosomal structure and biogenesis]
pfam00181 (6) Ribosomal Proteins L2, RNA binding domain.
pfam00203 (24) Ribosomal protein S19.
pfam00237 (150) Ribosomal protein L22p/L17e.
pfam00238 (130) Ribosomal protein L14p/L23e.
pfam00276 (209) Ribosomal protein L23.
pfam00338 (95) Ribosomal protein S10p/S20e.
pfam00347 (2) Ribosomal protein L6.
pfam00366 (132) Ribosomal protein S17.
pfam00406 (4) Adenylate kinase.
pfam00410 (96) Ribosomal protein S8.
pfam00444 (4) Ribosomal protein L36.
pfam00573 (222) Ribosomal protein L4/L1 family.
pfam00828 (10) Ribosomal proteins 50S-L15, 50S-L18e, 60S-L27A.
pfam00831 (131) Ribosomal L29 protein.
pfam00861 (26) Ribosomal L18 of archaea, bacteria, mitoch.
pfam01196 (2) Ribosomal protein L17.
pfam03947 (2) Ribosomal Proteins L2, C-terminal domain.
pfam13207 (1) AAA domain.
pfam17136 (1) Ribosomal proteins 50S L24/mitochondrial 39S L24.
PRK00001 (276) 50S ribosomal protein L3; Validated
PRK00004 (125) 50S ribosomal protein L24; Reviewed
PRK00010 (127) 50S ribosomal protein L5; Validated
PRK00136 (96) 30S ribosomal protein S8; Validated
PRK00276 (4) translation initiation factor IF-1; Validated
PRK00279 (5) adenylate kinase; Reviewed
PRK00306 (131) 50S ribosomal protein L29; Reviewed
PRK00310 (144) 30S ribosomal protein S3; Reviewed
PRK00357 (154) 30S ribosomal protein S19; Reviewed
PRK00765 (4) 50S ribosomal protein L36; Reviewed
PRK00550 (26) 30S ribosomal protein S5; Validated
PRK00565 (150) 50S ribosomal protein L22; Reviewed
PRK00596 (937) 30S ribosomal protein S10; Reviewed
PRK05179 (4) 30S ribosomal protein S13; Validated
PRK05182 (2) DNA-directed RNA polymerase subunit alpha; Provisional
PRK05309 (4) 30S ribosomal protein S11; Validated
PRK05319 (236) 50S ribosomal protein L4; Provisional
PRK05327 (2) 30S ribosomal protein S4; Validated
PRK05483 (130) 50S ribosomal protein L14; Validated
PRK05498 (35) 50S ribosomal protein L6; Validated
PRK05591 (2) 50S ribosomal protein L17; Validated
PRK05592 (25) 50S ribosomal protein L15; Reviewed
PRK05593 (27) 50S ribosomal protein L18; Reviewed
PRK05610 (133) 30S ribosomal protein S17; Reviewed
PRK05611 (25) 50S ribosomal protein L30; Reviewed
PRK05716 (5) methionine aminopeptidase; Validated
PRK05738 (209) 50S ribosomal protein L23; Reviewed
PRK08061 (124) 30S ribosomal protein S14; Reviewed
PRK09203 (135) 50S ribosomal protein L16; Reviewed
PRK09204 (25) preprotein translocase subunit SecY; Reviewed
PRK09374 (188) 50S ribosomal protein L2; Validated
smart00322 (2) K homology RNA-binding domain.
TIGR03918 (1) [FeFe] hydrogenase H-cluster maturation GTPase HydF. [FeFe] hydrogenase H-cluster maturation GTPase HydF. This model describes the family of the [Fe] hydrogenase maturation protein HypF as characterized in *Chlamydomonas reinhardtii* and found, in an operon with radical SAM proteins HydE and HydG, in numerous bacteria. It has GTPase activity, can bind an 4Fe-4S cluster, and is essential for hydrogenase activity. [Protein fate, Protein modification and repair]

19.4 Multiple-sequence alignment

Each S10-Clostridia RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 19.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The S10-Clostridia RNA itself is denoted by the line underneath marked 5' and 3' on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems

of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these predictions are manually an-

notated, so they might be under-predicted.) Annotated start codons, if any, are shaded **green**. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-Crick or G-U pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0”

denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, **red nucleotides**: nucleotide identity conserved more than 97% of the time, black nucleotides: 90%, gray nucleotides: 75%, red circle (◐): nucleotide is present 97% of the time, black circle (◑): 90%, gray circle (◒): 75%, white circle (◓): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Bfi-3-1, Bfi-4-1, Bsp-8-1, Cba-4-1, Cba-5-1, Cbo-1-1, Cbo-3-1, Cbo-4-1, Cbo-5-1, Cbo-6-1, Cci-1-1, Ccl-2-1, Ccl-4-1, Ccl-5-1, Ccl-7-1, Ccl-8-1, Ccl-9-1, Ceu-1-1, Cne-1-1, Csp-6-1, Csy-1-1, Csy-2-1, Csy-3-1, Ere-1-1, Hha-1-1, Hha-2-1, Lba-1-1, Lba-11-1, Lba-12-1, Lba-18-1, Lba-21-1, Lba-22-1, Lba-9-1, Lbo-1-1, Lbo-2-1, Lsp-1-1, Rgn-2-1, Rgn-3-1, Rho-1-1, Rla-1-1, Rto-1-1, [bo-1-1, [cl-1-1, env-100, env-1000, env-1001, env-1002, env-1003, env-1004, env-1005, env-101, env-1010, env-1011, env-1012, env-1013, env-1014, env-1015, env-1016, env-1017, env-1025, env-103, env-1031, env-104, env-1047, env-1048, env-1049, env-105, env-1050, env-1051, env-106, env-1060, env-1061, env-1062, env-1063, env-1064, env-1079, env-108, env-1080, env-1090, env-1091, env-1092, env-1098, env-1109, env-1110, env-1111, env-1112, env-1113, env-1114, env-1116, env-1117, env-1119, env-1120, env-1121, env-1122, env-1125, env-1126, env-1127, env-1128, env-1129, env-1130, env-1131, env-1132, env-1133, env-1134, env-1135, env-1136, env-1137, env-1138, env-1139, env-1140, env-1141, env-1142, env-1143, env-1144, env-115, env-1152, env-1153, env-116, env-1161, env-1164, env-1165, env-117, env-118, env-119, env-120, env-124, env-125, env-126, env-127, env-135, env-136, env-137, env-145, env-146, env-147, env-149, env-150, env-151, env-152, env-153, env-154, env-155, env-156, env-157, env-167, env-168, env-169, env-181, env-182, env-187, env-196, env-197, env-198, env-199, env-2, env-200, env-201, env-202, env-203, env-204, env-205, env-206, env-207, env-209, env-210, env-211, env-221, env-222, env-226, env-227, env-228, env-230, env-232, env-233, env-238, env-239, env-24, env-240, env-241, env-243, env-245, env-246, env-253, env-254, env-255, env-256, env-258, env-260, env-261, env-263, env-267, env-268, env-269, env-270, env-271, env-272, env-273, 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env-184 UGAUUGAUACUGUAAAAGAAAACGGGAGCAAAGGUGAGUGGGCCUGGCCAUUCCUAC
env-185
env-186 UGAUUGAUACUGUAAAAGAAAACGGGAGCAAAGGUGAGUGGGCCUGGCCAUUCCUAC
env-188 UGAUUGAUACUGUAAAAGAAAACGGGAGCAAAGGUGAGUGGGCCUGGCCAUUCCUAC
env-189 UGAUUGAUACUGUAAAAGAAAACGGGAGCAAAGGUGAGUGGGCCUGGCCAUUCCUAC
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env-191 AAAAGUCAGAAAAGAGAAUUAUCCUGAAGGCAUACGAUANNNNNNNNNNNNNNNN
env-192 UGAUUGAUACUGUAAAAGAAAACGGGAGCAAAGGUGAGUGGGCCUGGCCAUUCCUAC
env-193 UGAUUGAUACUGUAAAAGAAAACGGGAGCAAAGGUGAGUGGGCCUGGCCAUUCCUAC
env-194 UGAUUGAUACUGUAAAAGAAAACGGGAGCAAAGGUGAGUGGGCCUGGCCAUUCCUAC
env-195
env-208 UGAUUGAUACUGUAAAAGAAAACGGGAGCAAAGGUGAGUGGGCCUGGCCAUUCCUAC
Lba-19-1 UUAAGAAGAACGGUGGAGCAGUAAGCGGUCCGUUCCUUCUCAAAGAGGGAAGU
Lba-17-1 AAGAUGGUGGAGAGACAUCUGGUCCAGUACCUUCCAAAGAAAGGAAGUAGUUA
env-212 AAGAUGGUGGAGAGACAUCUGGUCCAGUACCUUCCAAAGAAAGGAAGUAGUUA
env-213 GGAGACAAGCGGUCCGUUCCUUCUCAAAGAAAGGAAGUUGUACGAUCCUGCGU
env-214
env-215
env-216 GACCGGUUCCAAUGCCUACAAAGGUGAGAAAGAUUACA AUCCUCAGAGCUGUUAUAA
env-217 GACCGNN
env-218 GACCGNNNNNNNNNNNNNNNNNNNGAACUCAUAGAGAUUUAUCGAGCUAAUUGCACCAA
env-219 GACCGGUUCCAAUGCCUACAAAGGUGAGAAAGAUACA AUCCUCAGAGCUGUUAUAA
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env-225 GACCG
env-229 GACCGGUUCCAAUGCCUACAAAGGUGAGAAAGAUACA AUCCUCAGAGCUGUUAUAA
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env-234
env-235
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env-237 GACCGGUUCCAAUGCCUACA
env-242 AGAAAUUGUAACA AUUCUAGAGCAUAACAUAAGUACAAGA AUCCUCAGAGCAAUUC
env-244
env-247 CACA AUUCAGAUCAUGCAGCUGUAAA AUUUAUGAUACGGUAAAGAAAGACAGGAG
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env-251 CACA AUUCAGAUCAUGCAGCUGUAAA AUUUAUGAUACGGUAAAGAAAGACAGGAG
env-252
env-257 CACA AUUCAGAUCAUGCAGCUGUAAA AUUUAUGAUACGGUAAAGAAAGACAGGAG
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env-265 CACA AUUCAGAUCAUGCAGCUGUAAA AUUUAUGAUACGGUAAAGAAAGACAGGAG
env-266
env-280
env-281
env-282
env-283
env-284 CGGU ACCU CUCC AA CA AAG AAG GA AGU UACA AUUCU UAGAGCU ACUCACA AGUA
env-288 CGGU ACCU CUCC AA CA AAG AAG GA AGU UACA AUUCU UAGAGCU ACUCACA AGUA
env-289 CGGU ACCU CUCC AA CA AAG AAG GA AGU UACA AUUCU UAGAGCU ACUCACA AGGA
env-290 CAUUGAU AUCAAAU GAAGCAGAAAUAAGCUUACA AUUAUUGAU AUUCCCGAA
env-291
env-300
env-303 CGGU ACCU CUCC AA CA AAG AAG GA AGU UACA AUUCU UAGAGCU ACUCACA AGUA
env-304 CGG
env-305 CGGU ACCU CUCC AA CA AAG AAG GA AGU UACA AUUCU UAGAGCU ACUCACA AGUA
env-306
env-307
env-308
env-309 CGGU ACCU CUCC AA CA AAG AAG GA AGU UACA AUUCU UAGAGCU ACUCACA AGUA
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env-311 CGGU ACCU CUCC AA CA AAG AAG GA AGU UACA AUUCU UAGAGCU ACUCACA AGUA
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env-314 UA CAAGGAUUCUGGAA CAGUUCGAGCAGAA CUCUA AAGAGACUUAUCGAUAUCA
env-315 AGAAUCUCA AAGAGACUUAUCGUAUCAUCAUCCAACACAGAAAGACACAGAGUCU
env-316
env-317
env-331
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env-333
env-334 CGGU ACCU CUCC AA CA AAG AAG GA AGU UANNNNNNNNNNNNNNNNNNNNNNNNNN
env-335 CGGU ACCU CUCC AA CA AAG AAG GA AGU UACA AUUCU UAGAGCU ACUCACA AGUA
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env-347
env-348
env-349



env-350
env-351
env-352
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env-364
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env-366 CGGUACCUCUCCAAACAAGAAGGAAGUAGUUACAAUUCUUAGAGCUACUCACAAGUA
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env-372 CGGUACCUCUCCAAACAAGAAGGAAGUAGUUAC
env-373 CGGUACCUCUCCAAACAAGAAGGAAGUAGUUACAAUUCUUAGAGCUACUCACAAGUA
env-374 CGGUACCUCUCCAAACAAGAAGGAAGUAGUUACAAUUCUUAGAGCUACUCACAAGUA
env-375
env-376 GUC AAGAAGAACGGAUUCACAGGUUAGCGGACCGGUACCCCUUCUACUAAGAAGGAAG
Bsp-5-1 GUC AAGAAGAACGGAUUCACAGGUUAGCGGACCGGUACCCCUUCUACUAAGAAGGAAG
env-377
env-379
env-380
env-381 CUACCAACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGACU
env-382 ACUACCGACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGAC
env-384 CUACCAACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGACU
Lor-1-1 CUACCAACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGACU
env-385
env-386 CUACCAACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGACU
env-387 ACUACCGACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGAC
env-388
Lba-15-1 ACUACCAACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGAC
env-389 ACUACCAACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGAC
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env-391 ACUACCAACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGAC
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env-393
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env-395 ACUACCAACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGAC
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env-409
env-410 ACUACCAACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGAC
Cha-3-1 ACUACCAACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGAC
env-411 CUACCAACAAGAAGGAAGUGGUUACUAUCCUUAGAGCUGUACAUAAAGUACAAAGACU
env-414
env-415
env-416 CCUGUGCGCUGCCUACCAAGAAAAGGAGUAGUUACAAUACUCGUGCAGUUCACAAAU
env-417
env-420
env-426 CCUGUGCGCUGCCUACUAAAGAAAAGGAGUAGUUACAAUACUCGUGCAGUUCACAAAU
env-427
env-428 AUCGAAAACAGUCAAGAAAAAUGGAGCACAGGUGAGCGGACCGGUACCGCUUCCACUA
env-429
env-430 AUCGAAAACAGUCAAGAAAAAUGGAGCACAGGUGAGCGGACCGGUACCGCUUCCUA . . .
env-431 AUCGAAAACAGUCAAGAAAAAUGGAGCACAGGUGAGCGGACCGGUACCGCUUCCACUA
env-432
env-433 AUCGAAAACAGUCAAGAAAAAUGGAGCACAGGUGAGCGGACCGGUACCGCUUCCACUA
env-434 NNN
env-435 AUCGAAAACAGUCAAGAAAAAUGGAGCACAGGUGAGCGGACCGGUACCGCUUCCACUA
env-436
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Hel-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax elongans</i> ATCC BAA-1513
Hgi-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax gibbonsii</i> ATCC 33959
Hla-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax larsenii</i> JCM 13917
Hme-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax mediterranei</i> ATCC 33500
Hmu-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax mucosum</i> ATCC BAA-1512
Hpr-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax prahovense</i> DSM 18310
Hsp-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax sp.</i> ATCC BAA-646
Hsu-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax sulfurifontis</i> ATCC BAA-897
Hvo-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloferax volcanii</i> DS2
Hbo-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halogeometricum borinquense</i> DSM 11551
Hsa-5-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halogramum salarium</i> B-1
Hka-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halomicrobium katesii</i> DSM 19301
Hmu-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halomicrobium mukohataei</i> DSM 12286
Hxa-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halopiger xanaduensis</i> SH-6
Hti-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorhabdus tiamatea</i> SARL4B
Hut-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorhabdus utahensis</i> DSM 12940
Hai-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum ailingense</i> JCM 13560
Har-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum arcis</i> JCM 13916
Hca-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum californiense</i> DSM 19288
Hco-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum coriense</i> DSM 10284
Hdi-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum distributum</i> JCM 10118
Hho-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum hochstenium</i> ATCC 700873
Hko-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum kocurii</i> JCM 14978
Hli-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum lipolyticum</i> DSM 21995
Hli-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum litoreum</i> JCM 13561
Hsa-6-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum saccharovororum</i> DSM 1137
Hsp-3-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum sp.</i> T3
Hte-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halorubrum tebenquichense</i> DSM 14210
Hpa-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halosarcina pallida</i> JCM 14848
Hca-3-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halosimplex carlsbadense</i> 2-9-1
Hli-3-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloterrigena limicola</i> JCM 13563
Hsa-7-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloterrigena salina</i> JCM 13891
Hth-2-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloterrigena thermotolerans</i> DSM 11522
Htu-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Haloterrigena turkmenica</i> DSM 5511
Has-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Halovivax asiaticus</i> JCM 14624
Nae-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba aegyptia</i> DSM 13077
Nas-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba asiatica</i> DSM 12278
Nch-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba chahannaoensis</i> JCM 10990
Nhu-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba hulunbeirensis</i> JCM 10989
Nma-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba magadii</i> ATCC 43099
Nta-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrialba taiwanensis</i> DSM 12281
Nga-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema gari</i> JCM 14663
Npa-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema pallidum</i> DSM 3751
Npe-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema pellirubrum</i> DSM 15624
Nve-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natrinema versiforme</i> JCM 10478
Ngr-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronobacterium gregoryi</i> SP2
Nam-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronococcus amylolyticus</i> DSM 10524
Nje-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronococcus jeotgali</i> DSM 18795
Noc-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronococcus occultus</i> SP4
Nin-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronolimnobius innermongolicus</i> JCM 12255
Nmo-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronomonas mooolapensis</i> 8.8.11
Nph-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronomonas pharaonis</i> DSM 2160
Nba-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronorubrum bangense</i> JCM 10635
Nsu-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronorubrum sulfidifaciens</i> JCM 14089
Nti-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Natronorubrum tibetense</i> GA33
Ssp-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	<i>Salinarchaeum sp.</i> Harcht-Bsk1
Hag-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halococcaceae	<i>Halococcus agarilyticus</i>
Hse-1-1	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halococcaceae	<i>Halococcus sediminicola</i>
Hru-1-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Halobellus rufus</i>
Hal-1-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloferax alexandrinus</i>
Hgi-2-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloferax gibbonsii</i>
Hsp-4-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloferax sp.</i> ATB1
Hna-1-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Haloferacaceae	<i>Haloplanus natans</i> DSM 17983
Hru-2-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halolamina rubra</i>

Hha-2-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halorubrum halophilum</i>
Hsa-8-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halorubrum saccharovororum</i>
Hsp-5-1	Archaea	Euryarchaeota	Halobacteria	Haloferacales	Halorubraceae	<i>Halorubrum sp.</i> BV1
Hdj-1-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halopiger djelfmassiliensis</i>
Hgo-1-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halopiger goleimassiliensis</i>
Hsa-9-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halopiger salifodinae</i>
Hla-3-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halostagnicola larsenii</i> XH-48
Hsp-6-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Halostagnicola sp.</i> A56
Hje-2-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Haloterrigena jeotgali</i> A29
Nal-1-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Natrinema altunense</i>
Nsp-1-1	Archaea	Euryarchaeota	Halobacteria	Natrialbales	Natrialbaceae	<i>Natrinema sp.</i> J7-1
env-1 to env-185						environmental samples

20.2 Gene contexts

Each S15-Halobacteria RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one S15-Halobacteria RNA are assigned a color; other domains are gray. Information about these conserved

domains is given in Section 20.3. The accession of the sequence containing each S15-Halobacteria RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each S15-Halobacteria RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 20.1.

abbrev.	Seq. accession		5′ at	3′ at	genes
env-1	CETH01443816.1	-	36475	36410	RNA→ rps15p (PRK08561) Ribosomal_S15 (pfam00312)→ PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-2	CEWR01249401.1	-	634	569	RNA→ rps15p (PRK08561) Ribosomal_S15 (pfam00312)→
env-3	CESY01224593.1	+	483	548	RNA→
env-4	CEQN01077410.1	-	89	24	RNA→
env-5	CEUZ01094134.1	+	294	359	RNA→ Ribosomal_S15 (pfam00312) Ribosomal_S13_N (pfam08069)→
env-6	CEVQ01090649.1	-	366	301	RNA→ Ribosomal_S13_N (pfam08069) →
env-7	JXWU01104845.1	+	1	97	RNA→ S15_NS1_EPRS_RNA-bind (cd00677) Ribosomal_S13_N (pfam08069)→
Hut-1-1	NC_013158.1	-	714527	714434	RNA→ rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353)→ hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-8	JXWS01091643.1	-	837	774	RNA→ rps15p (PRK08561) Ribosomal_S15 (pfam00312)→ PRK07409 (PRK07409) →
env-9	GQKUMWE02J03Y4	-	278	180	RNA→ rps15p (PRK08561) →
Hti-1-1	NZ_AFNTO2000006.1	-	58722	58627	RNA→ RpsO (COG0184) rps15p (PRK08561)→ hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-10	GSLNARP_contig10642	+	226	286	RNA→ rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353)→ PHA03247 (PHA03247) →
env-11	GSLNARP_GFPJP1N02I2Z83	-	234	174	RNA→ rps15p (PRK08561) →
env-12	SS_3KL_010_SOIL_10126881	-	211	126	RNA→ ← hypo
env-13	2140918017-39245	-	377	279	RNA→ Ribosomal_S13_N (pfam08069) →
env-14	GSLNAS_contig01475	-	166	104	RNA→ rps15p (PRK08561) →
env-15	APHM01016997.1	+	513	574	RNA→ RpsO (COG0184) rps15p (PRK08561)→ hypo →
Hac-1-1	NZ_BATA01000023.1	+	18137	18202	RNA→ RpsO (COG0184) rps15p (PRK08561)→ hypo → Pcc1 (COG2892)PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-16	GSLNARP_contig03059	+	263	328	RNA→ rps15p (PRK08561) →
Hsa-5-1	NZ_ALJD01000003.1	-	168876	168813	RNA→ ← hypo
env-17	P_A23_Liq_1_Fmt_1021563	+	164	234	RNA→ hypo →

env-18	P_A23_Liq_3_Fmt_1005281	-	131	61	RNA→
env-19	P_1C_Liq_3_UnCty_1085606	-	92	22	RNA→ ←hypo
env-20	P_1C_Sed_2_UnCty_1004024	+	2712	2782	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→
Har-2-1	NZ_AOJ01000049.1	-	118618	118548	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→ PRK14888 (PRK14888)→ RPS3A (COG1890)PRK04057 (PRK04057)→
Hsp-3-1	NZ_JH815329.1	+	386490	386560	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→ PRK14888 (PRK14888)→ RPS3A (COG1890)PRK04057 (PRK04057)→
env-21	P_1C_Liq_1_UnCty_1154732	+	171	241	RNA→
env-22	P_1C_Liq_1_UnCty_1093462	+	241	311	RNA→ ←hypo
env-23	P_A23_Liq_1_Fmt_1001349	+	3246	3316	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→
Hdi-1-1	NZ_AOJN01000047.1	+	134657	134727	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→ PRK14888 (PRK14888)→ RPS3A (COG1890)PRK04057 (PRK04057)→
Hli-2-1	NZ_AOJF01000030.1	-	133338	133268	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ PRK13800 (PRK13800)→ PRK14888 (PRK14888)→ RPS3A (COG1890)PRK04057 (PRK04057)→
Hsa-8-1	NZ_JNFH02000131.1	+	4096	4166	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→
env-24	P_1C_Liq_1_UnCty_1068401	-	82	12	RNA→ ←hypo
Hha-2-1	NZ_BBJP01000023.1	+	160344	160414	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→
Hko-1-1	NZ_AOJH01000076.1	+	51508	51578	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→
env-25	SL_6KL_011_BRINE_1017551	+	2402	2473	RNA→ ←hypo
env-26	ADL20m3uS_contig00641	-	3847	3777	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→
env-27	SL_6KL_011_BRINE_1076960	-	86	16	RNA→
env-28	SL_6KL_011_BRINE_1017271	+	2449	2519	RNA→ ←hypo
env-29	SL_6KL_011_BRINE_1090146	-	309	239	RNA→ rps15p (PRK08561)→
env-30	SL_6KL_011_BRINE_1023965	-	103	33	RNA→ ←cad (TIGR00779)CadD (COG4300)
env-31	SL_6KL_011_BRINE_1037136	-	103	33	RNA→
env-32	SL_6KL_011_BRINE_1181093	-	313	245	RNA→ ←hypo
env-33	SL_6KL_011_BRINE_1011159	-	349	278	RNA→ rps15p (PRK08561)→
env-34	SL_5KL_010_SED_10000937	+	4177	4247	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→ PRK14888 (PRK14888)→ PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015)→
env-35	SL_6KL_011_BRINE_1004176	-	2444	2374	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→ PRK14888 (PRK14888)→
env-36	SL_5KL_010_BRINE_10006748	-	203	133	RNA→
env-37	SL_5KL_010_BRINE_10374007	+	150	220	RNA→ ←hypo
env-38	SL_4KL_010_BRINE_10048044	-	170	100	RNA→
env-39	P_1C_Liq_3_UnCty_1004643	+	1043	1114	RNA→
env-40	P_1C_Liq_1_UnCty_1024121	-	147	77	RNA→
env-41	JXWS01080544.1	-	204	134	RNA→
Hsp-5-1	NZ_KN050825.1	+	8179	8249	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→ PRK14888 (PRK14888)→ RPS3A (COG1890)PRK04057 (PRK04057)→
Hca-2-1	NZ_AOJK01000009.1	-	96124	96054	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→ PRK14888 (PRK14888)→ RPS3A (COG1890)PRK04057 (PRK04057)→
Hli-1-1	NZ_AOJG01000013.1	-	3341	3271	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→
Hte-1-1	NZ_AOJD01000053.1	-	79083	79012	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→ PRK14888 (PRK14888)→ RPS3A (COG1890)PRK04057 (PRK04057)→
Hho-1-1	NZ_AOJO01000016.1	-	18126	18055	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→ PRK14888 (PRK14888)→ RPS3A (COG1890)PRK04057 (PRK04057)→
Hsa-6-1	NZ_AOJE01000062.1	+	16777	16847	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→ hypo→ PRK14888 (PRK14888)→ RPS3A (COG1890)PRK04057 (PRK04057)→
Hco-1-1	NZ_AOJL01000060.1	+	22697	22767	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ A-tRNA_syn_arch (TIGR03683)→ PRK14888 (PRK14888)→ RPS3A (COG1890)PRK04057 (PRK04057)→
Hai-1-1	NZ_AOJI01000013.1	+	26726	26797	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→ PRK14888 (PRK14888)→ RPS3A (COG1890)PRK04057 (PRK04057)→
env-42	P_1C_Sed_2_UnCty_1023573	+	227	298	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→
env-43	GSLNARP_contig15969	-	992	921	RNA→ rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353)→ hypo→
env-44	SL_6KL_011_BRINE_1115284	+	186	256	RNA→ rps15p (PRK08561)→
env-45	SL_6KL_011_BRINE_1080748	+	491	561	RNA→ hypo→

env-46	GSLNARP_GFPJP1N02H805S	-	330	265	RNA → Ribosomal_S13_N (pfam08069) →
Hpa-1-1	NZ_AEMG01000012.1	+	19787	19853	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → hypo → PRK14888 (PRK14888) → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) → RPS3A (COG1890)PRK04057 (PRK04057) → hypo →
Hci-1-1	NZ_JDTH01000002.1	-	369624	369515	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-47	P_1C_Sed_2_UnCty_1119332	-	170	102	RNA →
env-48	GSLSAAL.contig12508	-	55982	55920	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-49	ABOG01057646.1	-	101	46	RNA → ←hypo
env-50	ABOG01040231.1	+	23	85	RNA → hypo →
env-51	PR_CR_10_Liq_1.inCR_1012431	+	1250	1312	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → hypo →
env-52	GSLSAAL.contig09376	+	9954	10016	RNA → rps15p (PRK08561)S15_NS1_EPRS_RNA-bind (cd00677) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-53	GSLSAAL.contig12665	-	1260	1198	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →
env-54	GSLSAAL.contig00663	-	9050	8988	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-55	GSLSAAL.contig05944	+	161	223	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-56	PR_CR_10_Liq_1.inCR_1198478	+	83	145	RNA → rps15p (PRK08561)Ribosomal_S13_N (pfam08069) →
env-57	GSLSAAL.contig11173	-	1195	1133	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →
env-58	GSLSAAL.contig11466	+	1789	1851	RNA → Ribosomal_S13_N (pfam08069) →
Hla-2-1	NZ_AOL101000007.1	-	53069	53009	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → PRK13800 (PRK13800) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hsp-4-1	NZ_JPES01000120.1	+	18134	18194	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → hypo →
Hsp-2-1	NZ_AOLD01000018.1	+	222134	222194	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → hypo → hypo → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → RPS3A (COG1890)PRK04057 (PRK04057) →
Hme-1-1	NZ_AOLO01000006.1	+	119016	119079	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → Sema_3G (cd11255)PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hel-1-1	NZ_AOLK01000015.1	-	258454	258394	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → PRK13800 (PRK13800) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hvo-1-1	NZ_AOHU01000091.1	+	222642	222702	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → hypo → hypo → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hsu-2-1	NZ_AOLM01000003.1	-	127653	127593	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hde-1-1	NZ_AOLP01000019.1	+	71205	71265	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hpr-1-1	NZ_AOLG01000012.1	-	2307	2247	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → hypo → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hgi-1-1	NZ_AOLJ01000025.1	+	12076	12136	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hal-1-1	NZ_LK053000.1	-	2441666	2441606	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hgi-2-1	NZ_CP011947.1	-	1061334	1061274	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hmu-1-1	NZ_AOLN01000018.1	+	214475	214538	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-59	JXWS01117778.1	-	479	415	RNA → Ribosomal_S15 (pfam00312)Ribosomal_S13_N (pfam08069) →
env-60	SL_4KL_010_BRINE_10436734	-	180	109	RNA →
env-61	SL_4KL_010_BRINE_10606398	-	98	13	RNA → ←hypo
env-62	GSLNAS_F7I09SK02FQQIZ	-	461	396	RNA → Ribosomal_S13_N (pfam08069) →
env-63	SS_3KL_010_SOIL_10006438	-	147	81	RNA →
env-64	SS_3KL_010_SOIL_10046089	-	149	81	RNA → ←hypo
Has-1-1	NZ_AOIQ01000008.1	+	125599	125690	RNA → hypo → rps15p (PRK08561) → hypo → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →

env-65	JXWU01059374.1	+	232	306	RNA →
h3A-1-1	NZ_KK033115.1	-	376523	376455	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → RNAP_L (cd06927)PRK01146 (PRK01146) →
env-66	ADL20m3uS_contig11732	+	2953	3015	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-67	GSLNARP_contig20163	+	786	851	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →
Hka-1-1	NZ_KB905379.1	+	563781	563847	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hmu-2-1	NC_013202.1	-	2042594	2042528	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-68	P_A23_Liq_1_Fmt_1018204	-	215	150	RNA →
Ham-1-1	NZ_AOLW01000050.1	-	65561	65496	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hva-1-1	NZ_AOLQ01000067.1	-	102654	102589	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hja-1-1	NZ_AOLY01000009.1	-	228112	228047	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hma-1-1	NC_006396.1	+	1271347	1271412	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Hsa-2-1	NZ_JXAO01000006.1	+	33018	33083	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hca-1-1	NZ_AOLS01000008.1	+	111762	111827	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → hypo →
Hsi-1-1	NZ_AOLR01000002.1	+	110713	110778	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Har-1-1	NZ_AOLX01000027.1	-	130959	130894	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-69	P_1C_Sed_2_UnCty_1113621	+	256	321	RNA →
env-70	ADL5mRS1u_GM034OG01ABXFC	-	278	212	RNA → rps15p (PRK08561) →
env-71	APHM01021510.1	+	41573	41636	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-72	P_A23_Liq_2_Fmt_1000692	-	6203	6140	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-73	P_A23_Liq_1_Fmt_1001408	+	1210	1273	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-74	GSLNARP_contig28817	-	4621	4558	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-75	APHM01021421.1	-	191186	191123	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-76	SL_4KL_010_BRINE_10225816	-	172	88	RNA → ←hypo
Hca-3-1	NZ_AOIU01000035.1	+	133178	133243	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-77	SL_5KL_010_BRINE_10001052	+	13389	13455	RNA →
env-78	SL_4KL_010_BRINE_10019393	-	210	144	RNA →
env-79	SL_6KL_011_BRINE_1125381	+	228	294	RNA → ←hypo
env-80	SL_4KL_010_BRINE_10007098	-	1494	1429	RNA → ←hypo
env-81	SL_4KL_010_BRINE_10047307	+	2075	2140	RNA →
Hsa-1-1	NZ_BBMO01000001.1	+	1186894	1186960	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-82	GSLNARP_GFPJP1N02JIM46	+	6	71	RNA → rps15p (PRK08561) →
env-83	SL_4KL_010_BRINE_10142426	-	703	638	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-84	GSLNAS_F7I09SK02IMHTW	-	401	336	RNA → Ribosomal_S13_N (pfam08069) →
env-85	SL_4KL_010_BRINE_10262119	+	294	359	RNA → hypo →
env-86	SL_4KL_010_BRINE_10060909	+	1536	1601	RNA → ←hypo
env-87	SL_6KL_011_BRINE_1008478	-	2259	2195	RNA → ←MarR (COG1846)HTH_27 (pfam13463)
env-88	APHM01021551.1	+	1361	1425	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-89	GSLSAALGFP0ZZ301BID9D	-	389	325	RNA → Ribosomal_S13_N (pfam08069) →
env-90	GSLNAS_F7I09SK02H8PXO	+	23	89	RNA → Ribosomal_S13_N (pfam08069) →
env-91	GSLNAS_F7I09SK02JLDI6	-	289	223	RNA → rps15p (PRK08561) →

env-92	SL_6KL_011_BRINE_1005455	-	398	338	RNA → Ribosomal_S13_N (pfam08069) →
env-93	SL_5KL_010_BRINE_10006403	-	4853	4793	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-94	GRCP39E01BOGZV	-	496	438	RNA → Ribosomal_S13_N (pfam08069) →
env-95	P_A23_Liq_1_Fmt_1014328	-	338	279	RNA → Ribosomal_S13_N (pfam08069) →
env-96	APHM01010841.1	-	1489	1430	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →
env-97	P_A23_Liq_3_Fmt_1003525	+	2170	2229	RNA → Ribosomal_S13_N (pfam08069) →
env-98	APHM01021204.1	-	7840	7781	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → A-tRNA_syn_arch (TIGR03683) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-99	P_A23_Liq_1_Fmt_1003446	+	2004	2063	RNA → ←hypo
env-100	ADL20m3uS_contig11784	+	13949	14008	RNA → Ribosomal_S15 (pfam00312)Ribosomal_S13_N (pfam08069) →
env-101	ADL20m3uS_contig11574	-	35601	35542	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-102	SL_4KL_010_BRINE_10059133	-	223	164	RNA →
env-103	SL_6KL_011_BRINE_1000187	+	3664	3723	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-104	ADL5mRS1u_GM034OG02GJ0EH	-	169	110	RNA → hypo →
env-105	P_1C_Sed_2_UnCty_1025083	+	307	366	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → hypo →
env-106	SL_4KL_010_BRINE_10300408	+	236	296	RNA → ←hypo
env-107	SL_4KL_010_BRINE_10350117	+	300	360	RNA →
env-108	SL_4KL_010_BRINE_10637802	-	76	16	RNA →
env-109	SL_4KL_010_BRINE_10714498	+	107	167	RNA → ←hypo
env-110	SL_5KL_010_BRINE_10197968	+	189	249	RNA → ←hypo
env-111	SL_4KL_010_BRINE_10023425	+	3324	3384	RNA → ←hypo
env-112	SL_4KL_010_BRINE_10204576	+	115	175	RNA → rps15p (PRK08561) →
env-113	SL_5KL_010_SED_10041201	-	980	920	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →
env-114	SL_6KL_011_BRINE_1114368	+	262	322	RNA → ←hypo
env-115	SL_4KL_010_BRINE_10020685	-	82	22	RNA →
env-116	SL_6KL_011_BRINE_1011655	-	284	224	RNA → rps15p (PRK08561) →
env-117	SL_5KL_010_BRINE_10209515	+	284	344	RNA →
env-118	SL_6KL_011_BRINE_1001544	-	2246	2186	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → alaS (PRK13902) → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-119	SL_6KL_011_BRINE_1024707	-	74	14	RNA →
env-120	SL_5KL_010_BRINE_10059954	+	1069	1129	RNA → ←hypo
env-121	SL_4KL_010_BRINE_10154812	-	369	309	RNA → Ribosomal_S13_N (pfam08069) →
env-122	SL_4KL_010_BRINE_10414697	+	252	312	RNA →
env-123	SL_5KL_010_BRINE_10109794	-	494	434	RNA → Ribosomal_S13_N (pfam08069) →
env-124	SL_5KL_010_BRINE_10069484	-	177	117	RNA → ←hypo
env-125	SL_4KL_010_BRINE_10162859	-	206	146	RNA → ←hypo
env-126	SL_4KL_010_BRINE_10275765	-	177	117	RNA → ←hypo
env-127	GSLSAAL_GFP0ZZ301EKX2T	-	305	245	RNA → Ribosomal_S13_N (pfam08069) →
env-128	SL_4KL_010_BRINE_10097307	-	214	154	RNA → ←hypo
env-129	SL_4KL_010_BRINE_10048125	+	2101	2161	RNA →
env-130	SL_4KL_010_BRINE_10328064	+	187	247	RNA →
env-131	SL_6KL_011_BRINE_1018831	-	500	440	RNA → Ribosomal_S13_N (pfam08069) →
env-132	SL_4KL_010_BRINE_10013651	-	210	150	RNA → ←hypo
env-133	P_A23_Liq_1_Fmt_1006894	-	1048	989	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →
env-134	P_1C_Liq_3_UnCty_1011064	+	95	154	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-135	P_A23_Liq_2_Fmt_1004041	-	190	131	RNA →
env-136	APHM01021593.1	+	13468	13527	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →
env-137	P_A23_Liq_1_Fmt_1011742	+	225	284	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) →
env-138	P_A23_Liq_3_Fmt_1033915	-	244	185	RNA → rps15p (PRK08561) →
env-139	SL_5KL_010_BRINE_10002441	-	7903	7844	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →

env-140	P_A23_Liq_1_Fmt_1003155	-	239	180	RNA → ←-hypo
CHA-1-1	NZ_ASGZ01000049.1	+	3617	3683	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → PRK13800 (PRK13800)PBP2_HisK (cd13704) →
env-141	SL_4KL_010_BRINE_10085604	-	150	84	RNA →
env-142	SL_6KL_011_BRINE_1044936	-	158	90	RNA → ←-hypo
Nsu-1-1	NZ_AOHX01000042.1	-	103712	103642	RNA → RpsO (COG0184)rps15p (PRK08561) → PRK13800 (PRK13800) → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Hla-1-1	NZ_AGFZ01000124.1	+	17222	17292	RNA → RpsO (COG0184)rps15p (PRK08561) → RpsO (COG0184)rps15p (PRK08561) → hypo → hypo →
env-143	SL_5KL_010_BRINE_10055562	-	160	95	RNA → ←-hypo
env-144	SL_5KL_010_BRINE_10106739	+	525	590	RNA →
env-145	SL_5KL_010_BRINE_10001172	+	12650	12715	RNA →
Hxa-1-1	NC_015666.1	+	2172566	2172639	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-146	SL_6KL_011_BRINE_1235537	-	113	48	RNA →
env-147	SL_4KL_010_BRINE_10453247	-	143	76	RNA → ←-hypo
Ngr-1-1	NZ_AOIC01000118.1	+	22540	22604	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-148	SL_5KL_010_BRINE_10000150	+	26232	26305	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-149	SL_8KL_010_SED_10418808	-	198	125	RNA → rps15p (PRK08561) →
env-150	SL_5KL_010_BRINE_10011173	-	233	168	RNA → hypo →
env-151	SL_4KL_010_BRINE_10233198	-	160	95	RNA → ←-hypo
Hdj-1-1	NZ_HG315685.1	-	946456	946386	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-152	ADL20m3uS_GLR497S01CYFB9	-	217	152	RNA → hypo →
env-153	2140918017-18446	-	216	151	RNA →
env-154	SL_8KL_010_SED_10420993	+	127	192	RNA → ←-hypo
env-155	SL_4KL_010_BRINE_10209625	-	174	109	RNA →
env-156	SL_4KL_010_BRINE_10009987	-	1525	1460	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608) →
env-157	SL_6KL_011_BRINE_1000505	-	8160	8095	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-158	SL_6KL_011_BRINE_1064947	+	350	413	RNA → Ribosomal_S13_N (pfam08069) →
env-159	SL_5KL_010_BRINE_10001414	+	3775	3841	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-160	SL_4KL_010_BRINE_10410649	+	75	141	RNA → rps15p (PRK08561) →
Hgo-1-1	NZ_HG315690.1	+	210551	210620	RNA → RpsO (COG0184)rps15p (PRK08561) → minC (PRK00030) → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Npa-1-1	NZ_AOII01000045.1	+	2929	2999	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Nga-1-1	NZ_AOIJ01000082.1	+	8646	8716	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Nsp-1-1	NZ_AJVG01000015.1	+	33476	33546	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Nal-1-1	NZ_JNCS01000002.1	-	209831	209761	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-161	ADL20m3uS_GLR497S01D4APN	+	16	86	RNA → Ribosomal_S13_N (pfam08069) →
Hli-3-1	NZ_AOIT01000016.1	+	177551	177622	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Nve-1-1	NZ_AOID01000012.1	-	23261	23191	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Npe-1-1	NZ_AOIE01000076.1	+	117112	117182	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Hje-2-1	NZ_JDTG01000005.1	+	36819	36889	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Hth-2-1	NZ_AOIR01000045.1	+	2606	2676	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → hypo →
Nje-1-1	NZ_AOIA01000160.1	+	12251	12321	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →

env-162	SS_3KL_010_SOIL_10055065	+	1009	1078	RNA → ←-hypo
Noc-1-1	NC_019974.1	-	817241	817172	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Nam-1-1	NZ_AOIB01000013.1	+	141311	141380	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → PRK13029 (PRK13029) → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Nhu-1-1	NZ_AOIM01000039.1	-	10511	10445	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Nma-1-1	NZ_AOHS01000030.1	-	82382	82316	RNA → RpsO (COG0184)rps15p (PRK08561) →
Nta-1-1	NZ_AOIL01000028.1	+	66155	66221	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Nas-1-1	NZ_AOIO01000033.1	-	16936	16870	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Nch-1-1	NZ_AOIN01000092.1	+	72402	72468	RNA → RpsO (COG0184)rps15p (PRK08561) →
Nae-1-1	NZ_AOIP01000015.1	-	106319	106249	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Nba-1-1	NZ_AOHY01000002.1	-	121091	121021	RNA → RpsO (COG0184)rps15p (PRK08561) → PRK13800 (PRK13800) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Nin-1-1	NZ_AOHZ01000012.1	+	7343	7413	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hni-1-1	NZ_AOMA01000110.1	+	847	917	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → hypo →
Hsa-7-1	NZ_AOIS01000067.1	-	104689	104619	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Htu-1-1	NC_013743.1	-	1454550	1454480	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hsa-9-1	NZ_JROF01000003.1	+	151229	151299	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Nti-1-1	NZ_AOHW01000044.1	+	85110	85180	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → hypo → hypo → hypo → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-163	SL_5KL_010_BRINE_10001436	+	10905	10968	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →
env-164	GSLNARP_GFPJP1N02G46KO	+	349	411	RNA → hypo →
env-165	GSLNARP_GFPJP1N02HKHM0	+	321	383	RNA → ←-hypo
env-166	GSLNARP_GFPJP1N02HIBH2	+	301	362	RNA → hypo →
Hpa-2-1	NZ_AOIV01000045.1	+	239288	239352	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Hru-1-1	NZ_BBJO01000031.1	+	112826	112888	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → hypo →
Hbo-1-1	NZ_AOHT01000051.1	-	203113	203048	RNA → RpsO (COG0184)rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Ssp-1-1	NC_021313.1	-	2955315	2955225	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) → DUF2127 (pfam09900) →
Hje-1-1	NZ_AXZD01000009.1	-	4784	4656	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-167	P_1C_Sed_2_UnCty_1161793	+	207	266	RNA → hypo →
env-168	P_1C_Sed_2_UnCty_1391468	+	115	172	RNA → hypo →
Hna-1-1	NZ_KE386573.1	+	1370676	1370733	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) → HATPase_c (smart00387)BaeS (COG0642)PAS (pfam00989)PAS_9 (pfam13426) →
env-169	GSLNARP_GFPJP1N02I1Q94	-	238	180	RNA → rps15p (PRK08561) →
env-170	SL_6KL_011_BRINE_1044879	+	455	520	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →
env-171	SL_4KL_010_BRINE_10071208	+	486	551	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →
Nph-1-1	NC_007426.1	+	1546623	1546688	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
Nmo-1-1	NC_020388.1	+	1095664	1095729	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890)PRK04057 (PRK04057) →
env-172	GSLNARP_contig01185	+	384	449	RNA → Ribosomal_S13_N (pfam08069) →
env-173	SL_6KL_011_BRINE_1143269	+	264	329	RNA →
env-174	SL_4KL_010_BRINE_10124144	-	762	697	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →

env-175	SL_6KL_011_BRINE_1002809	+	7175	7240	RNA → Ribosomal_S13_N (pfam08069) → rps15p (PRK08561) Ribosomal_S15 (pfam00312) → hypo →
env-176	SL_4KL_010_BRINE_10155541	+	78	143	RNA → ← hypo
env-177	SL_4KL_010_BRINE_10020079	+	3724	3789	RNA →
env-178	SL_4KL_010_BRINE_10196029	+	155	220	RNA → Ribosomal_S13_N (pfam08069) →
Hsp-6-1	NZ_JMIP02000018.1	+	49610	49681	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890) PRK04057 (PRK04057) →
Hla-3-1	NZ_CP007055.1	+	931368	931439	RNA → RpsO (COG0184) rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890) PRK04057 (PRK04057) →
env-179	P_A23_Liq_1_Fmt_1002256	-	2002	1926	RNA → RpsO (COG0184) rps15p (PRK08561) → hypo → hypo →
env-180	JXWS01021119.1	-	732	656	RNA → RpsO (COG0184) rps15p (PRK08561) →
env-181	APHM01021963.1	-	6541	6476	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353) →
env-182	GSLNARP_contig29640	+	334	399	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353) → hypo →
env-183	GSLNARP_contig29701	+	717	782	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353) → hypo →
Hsu-1-1	NZ_CP008874.1	+	1124695	1124758	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890) PRK04057 (PRK04057) → archae_ser_T (TIGR04217) CDP-OH_P_transf (pfam01066) → HEAT (COG1413) prfB (PRK00578) HEAT_2 (pfam13646) →
Hha-1-1	NZ_A_JRK01000105.1	-	627	565	RNA → rps15p (PRK08561) Ribosomal_S15 (pfam00312) → rps15p (PRK08561) Ribosomal_S15 (pfam00312) →
Hru-2-1	NZ_BB_JN01000039.1	-	65806	65742	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353) → hypo →
env-184	2140918017-23842	+	118	178	RNA → rps15p (PRK08561) →
Hsa-4-1	NZ_AOME01000070.1	+	267801	267861	RNA → rps15p (PRK08561) Ribosomal_S15 (pfam00312) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890) PRK04057 (PRK04057) →
Hag-1-1	NZ_BAFM01000018.1	-	8492	8432	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890) PRK04057 (PRK04057) →
Hsa-3-1	NZ_AOMD01000016.1	+	129258	129318	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890) PRK04057 (PRK04057) →
Hse-1-1	NZ_BBMP01000004.1	+	37396	37456	RNA → rps15p (PRK08561) Ribosomal_S15 (pfam00312) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890) PRK04057 (PRK04057) →
Hth-1-1	NZ_AOMF01000159.1	-	66211	66151	RNA → rps15p (PRK08561) Ribosomal_S15 (pfam00312) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890) PRK04057 (PRK04057) →
Hmo-1-1	NZ_AOMC01000070.1	+	55554	55614	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353) → hypo → PRK14888 (PRK14888) → RPS3A (COG1890) PRK04057 (PRK04057) →
env-185	APHM01010805.1	+	863	937	RNA → Ribosomal_S15 (pfam00312) Ribosomal_S13_N (pfam08069) →
Hsp-1-1	NC_002607.1	-	593897	593832	RNA → RpsO (COG0184) rps15p (PRK08561) → hypo → PRK14888 (PRK14888) → PRK14888 (PRK14888) → RPS3A (COG1890) PRK04057 (PRK04057) →

20.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 20.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one S15-

cd00353 (98) Ribosomal protein S15 (prokaryotic)_S13 (eukaryotic) binds the central domain of 16S rRNA and is required for assembly of the small ribosomal subunit and for intersubunit association, thus representing a key element in the assembly of the whole ribosome.
cd00677 (2) S15/NS1/EPRS_RNA-binding domain.
cd06927 (1) L subunit of Archaeal RNA polymerase.
cd11255 (1) The Sema domain, a protein interacting module, of semaphorin 3G (Sema3G).
cd13704 (1) The periplasmic sensor domain of histidine kinase receptors; the type 2 periplasmic binding fold protein.
COG0184 (44) Ribosomal protein S15P/S13E [Translation, ribosomal structure and biogenesis]
COG0608 (1) Single-stranded DNA-specific exonuclease, DHH superfamily, may be involved in

Halobacteria RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 20.2.

archaeal DNA replication initiation [Replication, recombination and repair]
COG0642 (1) Signal transduction histidine kinase [Signal transduction mechanisms]
COG1413 (1) HEAT repeat [General function prediction only]
COG1846 (1) DNA-binding transcriptional regulator, MarR family [Transcription]
COG1890 (69) Ribosomal protein S3AE [Translation, ribosomal structure and biogenesis]
COG2892 (1) tRNA threonylcarbamoyladenine modification (KEOPS) complex, Pcc1 subunit [Translation, ribosomal structure and biogenesis]
COG4300 (1) Cadmium resistance protein CadD, predicted permease [Inorganic ion transport and metabolism]
pfam00312 (18) Ribosomal protein S15.

env-17 AAACCCUCUCGUCAGCUCGCGGGGGGUCACACGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-18 AAACCCUCUCGUCAGCUCGCGGGGGGUCACACGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-19 CGGGCGGGUUCUCGCGGGGGGUCACACGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-20 GCGUUCGCGGAGAGGAGUCGCGCCACGCGGGGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Har-2-1 CGGAAGCGAGGAGCGCUCGCGGGGUCACACGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hsp-3-1 AGAGCGUGGAAAGCGCGCGCCACUCGCGCCCAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-21 GCGUCGCGGAGCGGUCGCGGGGUCACACGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-22 UGUGUGCGCGGAAACGGGCGCGGUCGCGGACGACAAAGAACACCCUUAAGAACCCCGGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-23 GCGUUCGCGGACGGAUAUCGCGGUCGCGGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hdi-1-1 CCGAAGCGAGGAGCGCUCGCGGGCUCGCGACCAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hli-2-1 CCGAAGCGGAGGAGCGCUCGCGGGCUCGCGACCAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hsa-8-1 CUCUCAUUGUCCGACUCGCGGAGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hha-2-1 ACGCAAUCCACCGGAACCGGACCGGCGCACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hba-2-1 CUCUAGAUUGUCCGACUCGCGGAGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-25 CCGAUUCGCGGCGCGGUCGCGGCGGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-26 GCUACUUAAGUGAACAGCGGACGGGCGGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-27 UUCUCGUAUCUCGUAUCCAUCCGAGCGCCCAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-28 GGAAGNAAACCGUUCGCGACCGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-29 GUGUCAAGGCGAGUGUUCACCGGGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-30 ACGGAAUCUGGCGGUCGCGGGCGUCGACUCCAAAGAACACCCUUAAGAGGAGCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-31 UGUCGCGCGAUGAGUCCCGCGGACCAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-32 GGAAGCAAAACCGUUCGCGACCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-33 GAGGCGCGGUCGCGGGGAGCGACCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-34 UAAUCACUCCCAAGUCCGGAUUCGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-35 UAAUCACUCCCAAGUCCGGAUUCGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-36 UAAUCACUCCCAAGUCCGGAUUCGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-37 CGAGAGACCAAAUCCGCGGACGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-38 ACUCUCGCGGCUUACACCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-39 GGCCUUGGCGGUCGCGGACCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-40 GGUCUUAUGCCAGUCGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-41 GGUCUUCGCGGUCGCGGACCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hsp-5-1 CUAUUCUUCGUAUUCGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hca-2-1 GGGUCUCCCGGACGAGCGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hli-1-1 AGUUCUACCGCGCGGUCGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hte-1-1 ACCGAGGGGGGACGACCGGCGGUCGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hho-1-1 GACCGAGGGGGGACGACCGGCGGUCGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hsa-6-1 GUUCACCGCGCGGCGGCGGUCGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hco-1-1 GCGUUCGCGGACGAGUCGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hai-1-1 GCGGUUCGCGGACGAGUCGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-42 GCGGCGGUCUCGCGGCGGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-43 ACCGACGAGACGACAAAGCGGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-44 GCGGAGAGUGAUCGCGGAGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-45 ACUGGGGUGGACGCGGUCGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-46 CGUUCUUAACUCCGCGGAGUCGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hpa-1-1 CUCUACUCCGCGGCGGCGGAAACCGUACGCGGAAACCGUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

Hci-1-1 UGGGCGGUGGACGUGAGCGGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-47 ACCGACCGGUCGCGGCGGCGGACGACAAAGAACACGCUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-48 AGCCGGUUAUAGCACUUCGACCGGUGGUAUGCCAAACCGUUAUCAACACGACCGGACCGGUUCGACGGGAACACGACAGUCGAGAUCCGACGC CUCU

env-49 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-50 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-51 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-52 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-53 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-54 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-55 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-56 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-57 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hla-2-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hsp-4-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hsp-2-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hme-1-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hel-1-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hvo-1-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hsu-2-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hde-1-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hpr-1-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hgi-1-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hal-1-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hgi-2-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Hmu-1-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-59 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-60 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-61 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-62 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-63 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-64 ACACAGCGCGGCGGAAUCGACAU GUCGGC

Has-1-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-65 ACACAGCGCGGCGGAAUCGACAU GUCGGC

h3A-1-1 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-66 ACACAGCGCGGCGGAAUCGACAU GUCGGC

env-67 ACACAGCGCGGCGGAAUCGACAU GUCGGC

abbrev. of hits taxonomy of species

CMe-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Generaincertae sedis	<i>Candidatus</i> Methanoregula boonei 6A8
Mpa-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Generaincertae sedis	<i>Methanosphaerula palustris</i> E1-9c
Mba-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanocorpusculaceae	<i>Methanocorpusculum bavaricum</i> DSM 4179
Mla-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanocorpusculaceae	<i>Methanocorpusculum labreanum</i> Z
Mbo-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoculleus bouyensis</i> MS2
Mma-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoculleus marisnigri</i> JR1
Mse-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoculleus sediminis</i>
Msp-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoculleus</i> sp. MH98A
Mli-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanofollis liminatans</i> DSM 4140
Mpa-2-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanolacinia paynteri</i>
Mmo-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanomicrobium mobile</i> BP
Mli-2-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoplanus limicola</i> DSM 2279
Mpe-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanomicrobiaceae	<i>Methanoplanus petrolearius</i> DSM 11571
Mta-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanoregulaceae	<i>Methanolinea tarda</i> NOBI-1
Mfo-1-1	Archaea	Euryarchaeota	Methanomicrobia	Methanomicrobiales	Methanoregulaceae	<i>Methanoregula formicica</i> SMSF
env-1 to env-179						environmental samples

21.2 Gene contexts

Each S15-Methanobacteria RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one S15-Methanobacteria RNA are assigned a color; other domains are gray. Information about these conserved do-

mains is given in Section 21.3. The accession of the sequence containing each S15-Methanobacteria RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each S15-Methanobacteria RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 21.1.

abbrev.	Seq. accession	5′ at	3′ at	genes	
env-1	RUMENNODE_3956981.1	-	89863	89776	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353)→ RecJ (COG0608) recJ (TIGR00644)→
Mmo-1-1	NZ_JOMF01000007.1	-	133803	133716	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353)→ RecJ (COG0608) recJ (TIGR00644)→ PRK14888 (PRK14888) → PRK04057 (PRK04057) Ribosomal_S3Ae (pfam01015)→ hypo →
env-2	JGI24731J21663_1004595	+	6197	6276	RNA →
env-3	JGI24731J21663_1017363	-	1544	1465	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353)→ RecJ (COG0608) recJ (TIGR00644)→
env-4	JGI24732J26686_1057961	-	395	316	RNA → Ribosomal_S13_N (pfam08069) →
env-5	JGI24728J21555_1000004	-	136779	136704	RNA → ← hypo
env-6	3300000558_11395505	+	169	244	RNA → Ribosomal_S13_N (pfam08069) →
env-7	JGI24729J20445_1005959	-	2081	2005	RNA → RpsO (COG0184) rps15p (PRK08561)→ RecJ (COG0608) recJ (TIGR00644)→ PRK14888 (PRK14888) →
env-8	SL_5KL_010_SED_10017420	-	502	427	RNA → Ribosomal_S13_N (pfam08069) →
env-9	SL_3KL_010_SED_11192733	+	39	114	RNA → hypo →
env-10	SL_3KL_010_SED_10014053	-	606	533	RNA → RpsO (COG0184) rps15p (PRK08561)→
env-11	SL_3KL_010_SED_10006919	-	1903	1830	RNA → RpsO (COG0184) rps15p (PRK08561)→ RecJ (COG0608) A-tRNA_syn_arch (TIGR03683)→
Mpa-1-1	NC_011832.1	-	2788986	2788870	RNA → rps15p (PRK08561) Ribosomal_S15p_S13e (cd00353)→ RecJ (COG0608) recJ (TIGR00644)→ PhnD (COG3221) PRK14888 (PRK14888) → PRK00960 (PRK00960) Gly_His_Pro_Ser_Thr_tRS_core (cd00670)→ PRK04057 (PRK04057) Ribosomal_S3Ae (pfam01015)→
env-12	DHTCA2.GJDNVXK02I5RIS	-	305	187	RNA → hypo → rps15p (PRK08561) →
env-13	BDMC2_contig04064	-	1051	974	RNA → RpsO (COG0184) rps15p (PRK08561)→ RecJ (COG0608) recJ (TIGR00644)→ hypo →
env-14	2205091243	+	132	214	RNA →
env-15	2204637606	+	116	198	RNA → rps15p (PRK08561) →
env-16	JGI20214J14112_1457962	+	22	99	RNA → hypo → rps15p (PRK08561) →

env-17	SakLake120mDRAFT_c0001602	+	6343	6421	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK00960 (PRK00960)Gly_His_Pro_Ser_Thr_tRS_core (cd00670) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-18	JGI24729J20445_1013682	-	766	687	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) →
env-19	JGI24730J26740_1000033	+	32652	32731	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-20	3300000558_10042858	-	212	133	RNA → ←-hypo
env-21	3300001592_10223493	+	286	365	RNA → Ribosomal_S13_N (pfam08069) →
env-22	3300000032_0002816	-	6001	5922	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK00960 (PRK00960)Gly_His_Pro_Ser_Thr_tRS_core (cd00670) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → IPGM_like (cd16011)PhosphMutase (pfam10143) → hypo →
env-23	M940CN_1015758	-	1243	1152	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
Mpe-1-1	NC_014507.1	+	2024969	2025060	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → hypo → hypo → BluB (TIGR02476)Nitroreductase (pfam00881) → PRK03922 (PRK03922)DUF555 (pfam04475) → ribokinase_group_A (cd01942)PTZ00247 (PTZ00247) → COG3356 (COG3356)DUF2070 (pfam09843) →
Mpa-2-1	NZ_KN360943.1	+	84264	84354	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → hypo → hypo → BluB (TIGR02476)Nitroreductase (pfam00881) → PRK03922 (PRK03922)DUF555 (pfam04475) → ribokinase_group_A (cd01942)D-ribokin_bact (TIGR02152) → COG3356 (COG3356)DUF2070 (pfam09843) →
env-24	SakLake120mDRAFT_c0582226	-	239	158	RNA → Ribosomal_S13_N (pfam08069) →
env-25	3300001567_10013045	-	512	429	RNA → Ribosomal_S13_N (pfam08069) →
env-26	BDMC2_GDQ3S3O02JCPBT_left	-	164	85	RNA →
env-27	WSSedA1Ba3_1085468	-	477	405	RNA → Ribosomal_S15 (pfam00312)Ribosomal_S13_N (pfam08069) →
env-28	JGI20214J14112_1152162	+	106	178	RNA → Ribosomal_S13_N (pfam08069) →
env-29	3300001567_10002105	+	3402	3481	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK00960 (PRK00960)Gly_His_Pro_Ser_Thr_tRS_core (cd00670) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-30	JGI20214J14112_1280193	+	182	255	RNA →
env-31	WSSedB1B2_c063428	-	318	245	RNA → Ribosomal_S13_N (pfam08069) →
env-32	SL_5KL_010_SED_10000187	+	25577	25650	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → apgM (TIGR00306)IPGM_like (cd16011) → COG4801 (COG4801)glmU (TIGR01173) → hypo →
env-33	JGI24713J26584_10001722	-	13168	13096	RNA → hypo → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644)DHHA1 (pfam02272) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-34	JGI24714J26587_10001783	-	13168	13096	RNA → PRK11160 (PRK11160) → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644)DHHA1 (pfam02272) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-35	JGI24709J26583_10009162	+	2538	2609	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-36	JGI24707J26582_10010674	-	1854	1783	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-37	JGI24711J26586_10015339	-	2787	2716	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-38	JGI24710J26742_10008399	+	5929	6000	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-39	JGI24712J26585_10018987	+	1068	1139	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-40	JGI24708J26588_10009965	-	2892	2821	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-41	JGI24712J26585_10013199	-	199	130	RNA →
env-42	JGI24711J26586_10077988	+	748	817	RNA → rps15p (PRK08561) →
env-43	JGI24710J26742_10001551	-	12821	12752	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-44	JGI24709J26583_10004510	+	8218	8287	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-45	JGI24711J26586_10013429	+	3611	3680	RNA →

env-46	JGI24712J26585_10007655	+	6829	6898	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-47	JGI24712J26585_10045214	-	875	806	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608) →
env-48	JGI24709J26583_10006535	-	7792	7723	RNA → Ribosomal_S13_N (pfam08069) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-49	JGI24707J26582_10115681	+	545	614	RNA → rps15p (PRK08561) →
env-50	JGI24711J26586_10231301	-	163	94	RNA →
env-51	JGI24710J26742_10017231	-	2099	2030	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) →
env-52	JGI24708J26588_10034739	+	663	732	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-53	JGI24707J26582_10002665	-	12607	12538	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-54	JGI24708J26588_10002365	-	13618	13549	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-55	JGI24713J26584_10003246	+	742	811	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-56	JGI24714J26587_10001431	+	3149	3218	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-57	JGI24712J26585_10004187	-	10439	10370	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-58	JGI24711J26586_10011349	-	3687	3618	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-59	JGI24709J26583_10004141	-	10439	10370	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-60	JGI24710J26742_10004693	-	10439	10370	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Mbo-1-1	NC_018227.2	+	355435	355504	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-61	JGI24712J26585_10064911	+	1269	1338	RNA →
env-62	JGI24711J26586_10108516	+	580	649	RNA →
env-63	JGI24709J26583_10179352	-	163	94	RNA →
env-64	3300000558_10029409	+	126	197	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-65	3300000568_10009510	-	2212	2141	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-66	3300000032_0014754	+	78	149	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-67	3300000032_0066330	+	155	226	RNA → Ribosomal_S13_N (pfam08069) →
env-68	3300001592_10784659	+	44	115	RNA → rps15p (PRK08561) →
env-69	3300000507_100903	-	1882	1811	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → hypo →
Msp-1-1	NZ_JMIO1000090.1	+	12381	12453	RNA → hypo → hypo →
Mma-1-1	NC_009051.1	-	416072	416000	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → hypo → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → hypo → apgM (TIGR00306)lPGM_like (cd16011) → lipid_A_lpxD (TIGR01853)Bactofilin (pfam04519) → hypo →
env-70	JGI24712J26585_10323374	-	185	113	RNA →
Mse-1-1	NZ_JXOJ01000001.1	-	229493	229421	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → hypo → ApgM (COG3635)apgM (TIGR00306) → lipid_A_lpxD (TIGR01853)Bactofilin (pfam04519) → hypo →
env-71	3300000568_10009858	-	298	228	RNA → Ribosomal_S13_N (pfam08069) →
env-72	3300001567_10003374	-	12269	12199	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-73	3300000032_0044310	-	13186	13116	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-74	3300000558_11565244	+	1079	1149	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608) →
env-75	3300001592_10006172	-	8474	8404	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-76	JGI26437J51864_10033120	+	500	575	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →

env-77	3300001580_10010117	-	5601	5525	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK00960 (PRK00960)Gly_His_Pro_Ser_Thr.tRS_core (cd00670) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → apgM (TIGR00306)iPGM_like (cd16011) → hypo →
env-78	2232139342	-	237	160	RNA → rps15p (PRK08561) →
env-79	3300001592_10034324	+	2742	2834	RNA → RpsO (COG0184)rps15p (PRK08561) →
env-80	2013874838	-	1123	1033	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) →
env-81	BMHB3a_c125774	+	423	513	RNA → Ribosomal_S13_N (pfam08069) →
env-82	JGI2065J20421_1144564	+	131	221	RNA → hypo →
env-83	JGI26339J46600_10075181	-	619	538	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) →
env-84	JGI20225J20221_1000010	+	326457	326544	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-85	PRSSGFe2_Sequence0000002097	+	2324	2413	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312)Ribosomal_S13_N (pfam08069) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → apgM (TIGR00306)iPGM_like (cd16011) → PRK15319 (PRK15319)Bactofilin (pfam04519) → Hanta_G2 (pfam01561) →
env-86	WSSedL1Cam_c0002	+	96851	96938	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
CMe-1-1	NC_009712.1	+	2304410	2304492	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608) → PRK14888 (PRK14888)7tmA_CXCR1.2 (cd15178) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-87	JGI24729J20445_1138040	-	236	148	RNA → ←hypo
env-88	JGI24730J26740_1000008	+	72470	72558	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Mli-1-1	NZ_CM001555.1	-	2222769	2222698	RNA → RpsO (COG0184)rps15p (PRK08561) → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608) → RecJ (COG0608) → PRK14888 (PRK14888) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Mfo-1-1	NC_019943.1	-	469269	469194	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-89	3300000558_10035676	+	11455	11529	RNA → rps15p (PRK08561) →
env-90	3300001605_10975353	+	94	168	RNA → Ribosomal_S13_N (pfam08069) →
env-91	JGI24730J26740_1005506	-	3828	3750	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-92	JGI24729J20445_1023293	+	517	593	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-93	JGI24728J21555_1000106	+	20382	20458	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644)DHHA1 (pfam02272) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-94	JGI24732J26686_1000182	-	32050	31974	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644)DHHA1 (pfam02272) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-95	JGI24732J26686_1000319	+	14050	14126	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644)DHHA1 (pfam02272) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-96	JGI24728J21555_1038878	+	851	927	RNA →
env-97	JGI24730J26740_1222110	-	264	188	RNA → rps15p (PRK08561) →
env-98	3300001605_10027048	-	295	219	RNA → Ribosomal_S13_N (pfam08069) →
env-99	3300000185_101747	-	1221	1145	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) →
env-100	3300000032_0027748	-	1766	1690	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) →
env-101	3300000558_11833810	-	1221	1145	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) →
env-102	3300000568_10087874	+	4955	5031	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) →
env-103	3300001580_10011015	-	3080	3002	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644)DHHA1 (pfam02272) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-104	LWFCAn_GLO1YSU01E41BP	+	16	91	RNA → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → MFS (cd06174)efflux_EmrB (TIGR00711) →
env-105	3300001592_10847636	+	30	107	RNA → rps15p (PRK08561) →
env-106	3300001567_10049145	-	100	26	RNA →
env-107	JGI26437J51864_10417374	+	109	183	RNA → hypo →

env-108	JGI20214J14112_1001966	+	2925	3001	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) →
env-109	SakLake120mDRAFT_c0148215	-	531	456	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) →
env-110	JGI20214J14112_1066793	-	466	393	RNA → Ribosomal_S13_N (pfam08069) →
env-111	3300001567_10018396	-	99	26	RNA → ←hypo
env-112	3300000558_10022832	-	2400	2328	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-113	3300001580_10015327	+	3751	3823	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-114	3300001605_10381060	-	80	8	RNA →
env-115	JGI24729J20445_1000035	+	33077	33154	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-116	JGI24732J26686_1000038	+	17911	17988	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-117	BDMC2_FXAG6RB01C8MB5	-	494	416	RNA → Ribosomal_S13_N (pfam08069) →
env-118	JGI24729J20445_1010075	+	1466	1542	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608) →
env-119	JGI24728J21555_1016609	-	489	413	RNA → Ribosomal_S13_N (pfam08069) →
env-120	TB_GS10_10_10107963	-	629	548	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) →
env-121	TB_GS09_5_10262278	-	191	110	RNA → hypo →
env-122	JGI26437J51864_10012658	+	109	188	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-123	3300000032_0017538	+	5307	5386	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-124	WSSedA2C_c014251	-	708	630	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →
env-125	WSSedA1TJGI_c016288	+	290	368	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-126	WSSedA1Ba2_1007239	+	706	784	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608) →
env-127	WSSedA2Ca3_1014251	-	708	630	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → hypo →
env-128	WSSedA1Ba3_1001463	-	6148	6070	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-129	WSSedB1B2_c008138	+	171	249	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-130	WSSedB2T_c084959	+	143	221	RNA → ←hypo
env-131	WSSedB2T_c089397	-	217	139	RNA → ←hypo
env-132	JGI20213J14113_1035134	+	232	310	RNA → Ribosomal_S13_N (pfam08069) →
env-133	JGI20214J14112_1021896	-	626	548	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-134	JGI26437J51864_10213950	+	73	151	RNA → Ribosomal_S13_N (pfam08069) →
env-135	WSSedA1Ba3_1000357	-	6727	6647	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-136	WSSedA1Ba3_1272904	+	141	221	RNA → hypo →
env-137	WSSedA1Ba_1001070	+	2641	2721	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → hypo → PRK04024 (PRK04024) iPGM_like (cd16011) →
env-138	WSSedA2C_c018532	-	789	709	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-139	WSSedA1TJGI_c000079	-	10509	10429	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-140	WSSedB1B2_c003916	+	734	814	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-141	WSSedB2T_c002759	+	1013	1093	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608) →
env-142	WSSedA1Ba2_1000860	+	4312	4392	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-143	WSSedB2Ba_1002821	-	672	592	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-144	WSSedB2Ca_1002616	+	792	872	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-145	WSSedA2Ca3_1018532	-	789	709	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-146	JGI20214J14112_1000149	-	1161	1081	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) →
env-147	JGI20213J14113_1001057	+	1284	1364	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-148	WSSedA1Ba3_1006166	+	2461	2541	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-149	WSSedA1TJGI_c233835	+	122	202	RNA →
env-150	JGI26437J51864_10004063	-	209	129	RNA → hypo →

env-151	3300001567_10000108	-	84134	84057	RNA → hypo → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-152	WSSedA1Ba3_1177753	+	108	186	RNA → Ribosomal_S13_N (pfam08069) →
env-153	WSSedA1Ba_1152331	-	288	210	RNA → Ribosomal_S13_N (pfam08069) →
env-154	B3_all.c.Cons177848	-	485	407	RNA → rps15p (PRK08561) →
env-155	3300000568_10530120	+	366	444	RNA → hypo →
env-156	JGI24729J20445_1002298	-	5486	5409	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-157	JGI24729J20445_1020946	-	87	10	RNA →
env-158	JGI24732J26686_1097519	-	87	10	RNA →
env-159	JGI24732J26686_1003719	-	4772	4695	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-160	3300001567_10000097	+	54256	54336	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-161	3300000568_10641437	-	280	200	RNA → rps15p (PRK08561) →
env-162	JGI20214J14112_1020774	-	594	514	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) →
env-163	3300001580_10805722	+	98	181	RNA → rps15p (PRK08561) →
env-164	taComm3_C4593	-	845	762	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) →
env-165	3300001592_10767277	+	24	111	RNA → hypo → rps15p (PRK08561) →
env-166	JGI12104J13512_1000881	+	4950	5036	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) →
env-167	JGI11944J13513_1000579	+	5848	5934	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) →
env-168	JGI12104J13512_1055609	-	126	41	RNA →
env-169	3300000032_0028051	-	6644	6556	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) →
env-170	3300000558_10008220	-	2159	2071	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) →
env-171	3300000568_10642328	+	2264	2352	hypo → RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) →
env-172	3300000568_10908886	-	124	36	RNA →
env-173	3300001580_10001748	+	3910	3998	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) →
Mta-1-1	NZ_AGIY02000001.1	-	138618	138536	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-174	taComm3_C6165	-	76136	76054	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) →
env-175	JGI12104J13512_1000508	+	4260	4342	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-176	JGI11944J13513_1004555	+	4268	4350	RNA → RpsO (COG0184)rps15p (PRK08561) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Mli-2-1	NZ_CM001436.1	-	2802614	2802534	RNA → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → rps15p (PRK08561)Ribosomal_S15 (pfam00312) → RecJ (COG0608)recJ (TIGR00644) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) → hypo → hypo → hypo → hypo → PRKI0765 (PRK10765)Nitroreductase (pfam00881) → PRKI0765 (PRK10765)Nitroreductase (pfam00881) → PRK03922 (PRK03922)DUF555 (pfam04475) → PRK03922 (PRK03922)DUF555 (pfam04475) →
Mba-1-1	NZ_AUMX01000001.1	+	125785	125859	ribokinase_group_A (cd01942)PTZ00247 (PTZ00247) → ribokinase_group_A (cd01942)PTZ00247 (PTZ00247) → RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
Mla-1-1	NC_008942.1	-	271642	271569	RNA → rps15p (PRK08561)Ribosomal_S15p_S13e (cd00353) → RecJ (COG0608)recJ (TIGR00644) → PRK14888 (PRK14888) → PRK04057 (PRK04057)Ribosomal_S3Ae (pfam01015) →
env-177	BDMC2_GGZN29857_b1	-	505	433	RNA → Ribosomal_S15 (pfam00312)Ribosomal_S13_N (pfam08069) →
env-178	BDMC2_FXAG6RB01AV6H8	-	77	5	RNA →
env-179	JGI20163J15578_11006719	+	71	153	RNA → Ribosomal_S13_N (pfam08069) →

21.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 21.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one S15-

cd00353 (67) Ribosomal protein S15 (prokaryotic)_S13 (eukaryotic) binds the central domain of 16S rRNA and is required for assembly of the small ribosomal subunit and for intersubunit association, thus representing a key element in the assembly of the whole ribosome.

cd00670 (5) Gly_His_Pro_Ser_Thr_tRNA synthetase class II core domain.

cd01942 (4) Ribokinase-like subgroup A.

cd06174 (1) The Major Facilitator Superfamily (MFS) is a large and diverse group of secondary transporters that includes uniporters, symporters, and antiporters.

cd15178 (1) CXC chemokine receptor types 1 and 2, member of the class A family of seven-transmembrane G protein-coupled receptors.

cd16011 (6) uncharacterized subfamily of alkaline phosphatase, homologous to 2 3 bisphosphoglycerate independent phosphoglycerate mutase (iPGM) and bacterial phosphopentomutases.

COG0184 (31) Ribosomal protein S15P/S13E [Translation, ribosomal structure and biogenesis]

COG0608 (107) Single-stranded DNA-specific exonuclease, DHH superfamily, may be involved in archaeal DNA replication initiation [Replication, recombination and repair]

COG3221 (1) ABC-type phosphate/phosphonate transport system, periplasmic component [Inorganic ion transport and metabolism]

COG3356 (2) Predicted membrane-associated lipid hydrolase, neutral ceramidase superfamily [Lipid transport and metabolism]

COG3635 (1) 2,3-bisphosphoglycerate-independent phosphoglycerate mutase, archeal type [Carbohydrate transport and metabolism]

COG4801 (1) Predicted acyltransferase, contains DUF342 domain [General function prediction only]

pfam00312 (27) Ribosomal protein S15.

pfam00881 (4) Nitroreductase family.

pfam01015 (68) Ribosomal S3Ae family.

pfam01561 (1) Hantavirus glycoprotein G2.

pfam02272 (6) DHHA1 domain.

pfam04475 (4) Protein of unknown function (DUF555).

pfam04519 (3) Polymer-forming cytoskeletal.

pfam08069 (25) Ribosomal S13/S15 N-terminal domain.

pfam09843 (2) Predicted membrane protein (DUF2070).

pfam10143 (1) 2,3-bisphosphoglycerate-independent phosphoglycerate mutase. [2-phospho-D-glycerate + 2,3-diphosphoglycerate = 3-phospho-D-glycerate + 2,3-diphosphoglycerate]

PRK00960 (5) seryl-tRNA synthetase; Provisional

21.4 Multiple-sequence alignment

Each S15-Methanobacteria RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 21.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The S15-Methanobacteria RNA itself is denoted by the line underneath marked 5’ and 3’ on either end. Nucleotides in flanking sequences (i.e., not part of the motif)

Methanobacteria RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 21.2.

PRK03922 (4) hypothetical protein; Provisional

PRK04024 (1) cofactor-independent phosphoglycerate mutase; Provisional

PRK04057 (68) 30S ribosomal protein S3Ae; Validated

PRK08561 (137) 30S ribosomal protein S15P; Reviewed

PRK10765 (2) nitroreductase A; Provisional

PRK11160 (1) cysteine/glutathione ABC transporter membrane/ATP-binding component; Reviewed

PRK14888 (76) KEOPS complex Pcc1-like subunit; Provisional

PRK15319 (1) AIDA autotransporter-like protein ShdA; Provisional

PTZ00247 (3) adenosine kinase; Provisional

TCR00306 (5) phosphoglycerate mutase (2,3-diphosphoglycerate-independent), archaeal form. [Energy metabolism, Glycolysis/gluconeogenesis]

TIGR00644 (87) single-stranded-DNA-specific exonuclease RecJ. [DNA metabolism, DNA replication, recombination, and repair]

TIGR00711 (1) drug resistance transporter, EmrB/QacA subfamily. [Cellular processes, Toxin production and resistance, Transport and binding proteins, Other]

TIGR01173 (1) UDP-N-acetylglucosamine diphosphorylase/glucosamine-1-phosphate N-acetyltransferase. [Cell envelope, Biosynthesis and degradation of murein sacculus and peptidoglycan, Cell envelope, Biosynthesis and degradation of surface polysaccharides and lipopolysaccharides, Central intermediary metabolism, Amino sugars]

TIGR01853 (2) UDP-3-O-[3-hydroxymyristoyl] glucosamine N-acyltransferase LpxD. [3-hydroxymyristoyl] glucosamine N-acyltransferase LpxD. This model describes LpxD, an enzyme for the biosynthesis of lipid A, a component of lipopolysaccharide (LPS) in the outer membrane outer leaflet of most Gram-negative bacteria. Some differences are found between lipid A of different species. This protein represents the third step from UDP-N-acetyl-D-glucosamine. The group added at this step generally is 14:0(3-OH) (myristate) but may vary; in Aquifex it appears to be 16:0(3-OH) (palmitate). [Cell envelope, Biosynthesis and degradation of surface polysaccharides and lipopolysaccharides]

TIGR02152 (1) ribokinase. [Energy metabolism, Sugars]

TIGR02476 (2) 5,6-dimethylbenzimidazole synthase. [Biosynthesis of cofactors, prosthetic groups, and carriers, Heme, porphyrin, and cobalamin]

TIGR03683 (1) alanyl-tRNA synthetase.

are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in green. (But note: these

env-12
 env-13 GGCGGAUCCUUGCAUCGGCGGG
 env-14
 env-15
 env-16
 env-17 GCAACCGGAAAAUCAUAGGCC
 env-18 AUCCUGGAAUCCAGGGGUGCA
 env-20
 env-21 AGAUCAUCCGGGAUAACGGCCU
 env-22 AGAUCAUCCGGGAUAACGGCCU
 env-23 GAGUCCAAGCGUCAAAACUUGC
 Mpe-1-1 UCUUAGAAAAGGAAGGAAUGUCA
 Mpa-2-1 UCUUAGAAAAGGAAGGAAUGUCC
 env-24
 env-25 GGACAGGUACGGAGUCCCGAU
 env-26
 env-27 GAUCGUAAGGAAAAGGGACUG
 env-28
 env-29 GAGAUCUAAAAAGAGCAGGGCA
 env-30
 env-31
 env-32 GUGUCCCGACAUAACUCGCG
 env-33 CGGAGAUCCUCCGCGAAAAAGG
 env-34 CGGAGAUCCUCCGCGAAAAAGG
 env-35 ACCAGAUCCUUCGCGAAAAUGA
 env-36 ACCAGAUCCUUCGCGAAAAUGA
 env-39 ACCAGAUCCUUCGCGAAAAUGA
 env-40 ACCAGAUCCUUCGCGAAAAUGA
 env-41
 env-42
 env-44 ACGAGAUCCUCCGCGAAAAAGG
 env-45
 env-46 AACGAGAUCCUCCGCGAAAAAGG
 env-47 AACGAGAUCCUCCGCGAGAAGG
 env-48 AACGAGAUCCUCCGCGAGAAGG
 env-49
 env-51 AACGAGAUCCUCCGCGAGAAGG
 env-52 AACGAGAUCCUCCGCGAGAAGG
 env-53 AAUCAGAUCCUUCGCGAGAACG
 Mbo-1-1 AACGAGAUCCUCCGCGAGAAGG
 env-61
 env-64 AACGGAGAUUCUCCGUGAGAAC
 env-65 UAACGGAGAUUCUCCGUGAGAA
 env-66 AACGGAGAUUCUCCGUGAGAAC
 env-67 AACGGAGAUUCUCCGUGAGAAC
 env-68
 env-69 AACGAAAUCUCCGCGAGAAGG
 Msp-1-1
 Mma-1-1 GGCGAGAUCCUCCGCGAGAAGG
 env-70
 Mse-1-1 AGCGAGAUCCUCCGCGAGAAGG
 env-71
 env-72 AAACGAGAUCCUCCGCGAGAAG
 env-73 AAACGAGAUCCUCCGCGAGAAG
 env-76 AGAUACUCAAGGAGAAGGGCCU
 env-77 CUGGAGGAGAACGGUCUGCAGU
 env-78
 env-79 UCAUCAGGGAGAAAGGAUUGGA
 env-80 GACAUCUAAAAGGAGAACAAAGG
 env-81 ACAUCUAAAAGGAGAACAAAGG
 env-82
 env-83 GACAUCUAAAAGGAGAACAAAGG
 env-84 GACAUCUAAAAGGAGAACAAAGG
 env-85 UAUCUAGUCCGAGAACAAAGC
 env-86 CAUCUUGAAAAGGAAACCGGUC
 CMe-1-1 AUCGGUGACAUCUUAACGGAGA
 env-87
 env-88 GACAUCUAAAAGGAGAACAAAGG
 Mli-1-1 AUCCUCAGCCAGAACGGGCUCG
 Mfo-1-1 GGAUCGGGACCAUUCUCCGCGA
 env-89
 env-90
 env-91 AGCGGAUCGGAACCAUCCUGAG
 env-92 GCGGAUCGGACCAUCUACGG
 env-96
 env-97
 env-98
 env-99 GGGACAUCUCCGAGAGCGAACAA
 env-103 CGUAUCGGCGAUUCUAAAAG
 env-104
 env-105
 env-106
 env-107
 env-108 GAUAUCUCCGGGAGAACAAAG

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Gfo-1-1	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	<i>Gramella forsetii</i> KT0803
Kal-1-1	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	<i>Kordia algicida</i> OT-1
Lbl-1-1	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	<i>Leeuwenhoekiella blandensis</i> MED217
Pir-1-1	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	<i>Polaribacter irgensii</i> 23-P
Rbi-1-1	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	<i>Robiginitalea biformata</i> HTCC2501
Zpr-1-1	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	<i>Zunongwangia profunda</i> SM-A87
Fba-5-1	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	<i>bacterium</i> ALC-1	
Fba-6-1	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	<i>bacterium</i> HTCC2170	
Cca-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Crocinitomicaceae	<i>Crocinitomix catalasitica</i> ATCC 23190
Fta-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Cryomorphaceae	<i>Fluviicola taffensis</i> DSM 16823
Aca-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aequorivita capsosiphonis</i> DSM 23843
Asu-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aequorivita sublithicola</i> DSM 14238
Avl-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aequorivita vladivostokensis</i>
Ale-1-1 to Ale-1-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Algibacter lectus</i>
Ale-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Altibacter lentus</i>
Aag-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina agarilytica</i> ZC1
Aat-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina atlantica</i>
Ala-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina latercula</i> DSM 2041
Ama-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina macrocephali</i> JAMB N27
Ame-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina megaterium</i> XH134
Amu-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina muelleri</i> DSM 19832
Apa-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Aquimarina pacifica</i>
Aal-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Arenibacter algicola</i>
Ace-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Arenibacter certesii</i> DSM 19833
Ala-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Arenibacter latericius</i> DSM 15913
Bzo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Bergeyella zoohelcum</i> ATCC 43767
Bzo-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Bergeyella zoohelcum</i> CCUG 30536
Bar-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Bizionia argentinensis</i> JUB59
Cca-2-1 to Cca-2-3	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga canimorsus</i>
Cca-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga canimorsus</i> Cc5
Cca-4-1 to Cca-4-3	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga canis</i>
Ccy-1-1 to Ccy-1-3	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga cynodegmi</i>
Ccy-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga cynodegmi</i> DSM 19736
Coc-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga ochracea</i>
Coc-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga ochracea</i> F0287
Coc-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga ochracea</i> str. Holt 25
Csp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i> sp. oral taxon 324 str. F0483
Csp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i> sp. oral taxon 326 str. F0382
Csp-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i> sp. oral taxon 329 str. F0087
Csp-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i> sp. oral taxon 332 str. F0381
Csp-6-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i> sp. oral taxon 335 str. F0486
Csp-7-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i> sp. oral taxon 336 str. F0502
Csp-8-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i> sp. oral taxon 338 str. F0234
Csp-9-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i> sp. oral taxon 380 str. F0488
Csp-10-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i> sp. oral taxon 412 str. F0487
Cal-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga algicola</i> DSM 14237
Cba-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga baltica</i> 13
Cba-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga baltica</i> 18
Cba-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga baltica</i> 4
Cba-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga baltica</i> NN016038
Cge-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga geojensis</i> KL-A
Cly-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga lytica</i>
Cly-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga lytica</i> DSM 7489
Csp-11-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga</i> sp. E6(2014)
Csp-12-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Cellulophaga</i> sp. Hel.L.12
Can-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium angstadtii</i>
Cca-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium caeni</i> DSM 17710
Cda-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium daeguense</i> DSM 19388
Cfo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium formosense</i>
Cga-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium gallinarum</i>
Cgl-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium gleum</i> ATCC 35910
Cha-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium haifense</i> DSM 19056
Cha-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium halperniae</i>
Chi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium hispalense</i> DSM 25574
Cin-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium indologenes</i>

Cin-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium indologenes</i> NBRC 14944
Cje-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium jeonii</i>
Cko-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium koreense</i> CCUG 49689
Clu-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium luteum</i>
Cor-1-1 to Cor-1-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium oranimense</i> G311
Cpi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium piperi</i>
Cso-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium soli</i>
Cso-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium solincola</i>
Csp-13-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. BLS98
Csp-14-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. CF365
Csp-15-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. FH1
Csp-16-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. FH2
Csp-17-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. JM1
Csp-18-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. OV259
Csp-19-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. OV705
Csp-20-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. OV715
Csp-21-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. P1-3
Csp-22-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. StRB126
Csp-23-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. UNC8MFCol
Csp-24-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. YR459
Csp-25-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. YR460
Csp-26-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. YR477
Csp-27-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. YR480
Csp-28-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. YR485
Csp-29-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium</i> sp. YR561
Cta-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium taiwanense</i>
Cte-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium tenax</i> DSM 16811
Cvr-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Chryseobacterium vrystaatense</i>
Ddo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Dokdonia donghaensis</i> DSW-1
Dsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Dokdonia</i> sp. MED134
Dsp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Dokdonia</i> sp. PRO95
Ean-1-1 to Ean-1-4	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i>
Ean-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> Ag1
Ean-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> FMS-007
Ean-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUH1
Ean-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUH11
Ean-6-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUH4
Ean-7-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUH6
Ean-8-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUHP1
Ean-9-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUHP2
Ean-10-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> NUHP3
Ean-11-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> PW2809
Ean-12-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia anophelis</i> R26
Eme-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia meningoseptica</i> 502
Eme-2-1 to Eme-2-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia meningoseptica</i> ATCC 13253 = NBRC 12535
Emi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Elizabethkingia miricola</i>
Ebr-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Empedobacter brevis</i> NBRC 14943 = ATCC 43319
Efa-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Empedobacter falsenii</i>
Ead-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Eudoraea adriatica</i> DSM 19308
Fic-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flaviramulus ichthyoenteri</i> Th78
Fba-7-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacteriaceae bacterium</i> HQM9
Fba-8-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacteriaceae bacterium</i> P7-3-5
Fba-9-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacteriaceae bacterium</i> S85
Fan-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium antarcticum</i> DSM 19726
Faq-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium aquatile</i> LMG 4008 = ATCC 11947
Fbe-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium beibuense</i> F44-8
Fbr-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium branchiophilum</i> FL-15
Fca-1-1 to Fca-1-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium cauense</i> R2A-7
Fch-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium chungangense</i> LMG 26729
Fco-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium columnare</i> ATCC 49512
Fda-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium daejeonense</i> DSM 17708
Fde-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium denitrificans</i> DSM 15936
Fen-1-1 to Fen-1-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium enshiense</i> DK69
Ffi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium filum</i> DSM 17961
Ffr-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium frigidarium</i> DSM 17623

Ffr-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium frigidis</i> PS1
Fge-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium gelidilacus</i> DSM 15343
Fgi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium gilvum</i>
Fhi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium hibernum</i>
Fhy-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium hydatis</i>
Fin-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium indicum</i> GPTSA100-9
Fli-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium limnosediminis</i> JC2902
Fps-1-1 to Fps-1-10	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium psychrophilum</i>
Fps-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium psychrophilum</i> FPG101
Fps-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium psychrophilum</i> FPG3
Fps-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium psychrophilum</i> JIP02/86
Fri-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium rivuli</i> DSM 21788
Fri-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium rivuli</i> WB 3.3-2 = DSM 21788
Fsa-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium saliperosum</i> S13
Fsa-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium sasangense</i> DSM 21067
Fse-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium seoulense</i>
Fso-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium soli</i> DSM 19725
Fsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. 316
Fsp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. 83
Fsp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. ABG
Fsp-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. ACAM 123
Fsp-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. AED
Fsp-6-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. CF136
Fsp-7-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. F52
Fsp-8-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. JRM
Fsp-9-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. KJJ
Fsp-10-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. KMS
Fsp-11-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. MEB061
Fsp-12-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. URHB0058
Fsp-13-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i> sp. WG21
Fsu-1-1 to Fsu-1-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium subsaxonicum</i> WB 4.1-42 = DSM 21790
Fsu-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium succinicans</i> LMG 10402
Fsu-3-1 to Fsu-3-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium suncheonense</i> GH29-5 = DSM 17707
Fte-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium tegetincola</i> DSM 22377
Fag-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Formosa agariphila</i> KMM 3901
Fsp-14-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Formosa</i> sp. AK20
Gsa-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gaetbulibacter saemankumensis</i> DSM 17032
Gsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Galbibacter</i> sp. ck-12-15
Gme-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gelidibacter mesophilus</i> DSM 14095
Gli-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia limmaea</i> DSM 15749
Gsp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia</i> sp. CAL575
Gsp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia</i> sp. CBA3202
Gsp-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia</i> sp. Hel.L.29
Gsp-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gillisia</i> sp. JM1
Gec-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gramella echinicola</i> DSM 19838
Gpo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Gramella portivictoriae</i> DSM 23547
Iha-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Imtechella halotolerans</i> K1
Jpa-1-1 to Jpa-1-3	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Jejuia pallidulitea</i>
Jma-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Joostella marina</i> DSM 19592
Kje-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Kordia jejudonensis</i>
Kzh-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Kordia zhangzhouensis</i>
Ksp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Krokinobacter</i> sp. 4H-3-7-5
Lja-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Lacinutrix jangbogonensis</i>
Lsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Lacinutrix</i> sp. 5H-3-7-4
Lsp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Lacinutrix</i> sp. Hel.L.90
Lsp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Leeuwenhoekella</i> sp. Hel.L.48
Lsp-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Leeuwenhoekella</i> sp. MAR.2009.132
Myu-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Mangrovimonas yunxiaonensis</i>
Man-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Maribacter antarcticus</i> DSM 21422
Mfo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Maribacter forsetii</i> DSM 18668
Msp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Maribacter</i> sp. Hel.L.7
Mth-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Maribacter thermophilus</i>
Mze-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Mesoflavibacter zeaxanthinifaciens</i> DSM 18436
Mze-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Mesoflavibacter zeaxanthinifaciens</i> S86
Mmo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Mesonnia mobilis</i> DSM 19841

Mru-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Muricauda ruestringensis</i> DSM 13258
Msp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Muricauda</i> sp. MAR_2010_75
M[0]-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides [odoratimimus]</i> CIP 103059
Min-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides injenensis</i> M09-0166
Mod-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides odoratimimus</i>
Mod-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides odoratimimus</i> CCUG 10230
Mod-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides odoratimimus</i> CCUG 12700
Mod-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides odoratimimus</i> CCUG 12901
Mod-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides odoratimimus</i> CCUG 3837
Mod-6-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides odoratimimus</i> CIP 101113
Mod-7-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides odoratimimus</i> H1bi
Mod-8-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides odoratus</i> DSM 2801
Mpr-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides profundi</i>
Msp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Myroides</i> sp. A21
Nma-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Nonlabens marinus</i> S1-08
Nul-1-1 to Nul-1-6	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Nonlabens ulvanivorans</i>
Oma-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Olleya marilimosa</i> CAM030
Osp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Olleya</i> sp. VCSA23
Osp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Olleya</i> sp. VCSM12
Orh-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Ornithobacterium rhinotracheale</i> DSM 15997
Orh-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Ornithobacterium rhinotracheale</i> H06-030791
Orh-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Ornithobacterium rhinotracheale</i> ORT-UMN 88
Psp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Polaribacter</i> sp. Hel1_33_49
Psp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Polaribacter</i> sp. Hel1_85
Psp-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Polaribacter</i> sp. Hel1_L88
Psp-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Polaribacter</i> sp. MED152
Pgo-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroflexus gondwanensis</i> ACAM 44
Pto-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroflexus torquis</i> ATCC 700755
Ptr-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroflexus tropicus</i> DSM 15496
Pbu-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroserpens burtonensis</i> DSM 12212
Pda-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroserpens damuponensis</i>
Pja-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroserpens jangbogonensis</i>
Pme-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroserpens mesophilus</i>
Psp-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Psychroserpens</i> sp. Hel1_L66
Ran-1-1 to Ran-1-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i>
Ran-2-1 to Ran-2-2	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> ATCC 11845 = DSM 15868
Ran-3-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> RA-CH-2
Ran-4-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> RA-GD
Ran-5-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> RA-SG
Ran-6-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> RA-YM
Ran-7-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Riemerella anatipestifer</i> Yb2
Ssp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Salegentibacter</i> sp. Hel1_L6
Ste-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Salinimicrobium terrae</i> DSM 17865
Sxi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Salinimicrobium xinjiangense</i> DSM 19287
Ssp-2-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Sediminibacter</i> sp. Hel1_L10
Sze-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Siansivirga zeaxanthimifaciens</i> CC-SAMT-1
Tna-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tamlana nanhaiensis</i>
Tse-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tamlana sedimentorum</i>
Tma-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tenacibaculum maritimum</i> NCIMB 2154
Tme-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tenacibaculum mesophilum</i>
Tov-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tenacibaculum ovolyticum</i> DSM 18103
Tsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Tenacibaculum</i> sp. 47A_GOM-205m
Wma-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Weeksella massiliensis</i>
Wvi-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Weeksella virosa</i> DSM 16922
Wps-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Winogradskyella psychrotolerans</i> RS-3
Wsp-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Winogradskyella</i> sp. PG-2
Zam-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Zhouia amylolytica</i> AD3
Zga-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Zobellia galactanivorans</i>
Zul-1-1	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Zobellia uliginosa</i>
Psp-6-1	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Psychromonadaceae	<i>Psychromonas</i> sp. SP041
env-1 to env-2152						environmental samples

22.2 Notes

Superscript numbers are used to annotate any S15-Flavobacteria RNA that has special characteristics (described below). These numeric annotations will be

¹ No UAnnUUUG is apparent in the 100 nucleotides upstream of this motif in-

22.3 Gene contexts

Each S15-Flavobacteria RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one S15-Flavobacteria RNA are assigned a color; other domains are gray. Information about these conserved

used in Sections 22.3 and 22.5. The meaning of the numbers are as follows.

stance.

domains is given in Section 22.4. The accession of the sequence containing each S15-Flavobacteria RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each S15-Flavobacteria RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 22.1. (Superscript numbers refer to annotations listed in Section 22.2)

abbrev.	Seq. accession		5′ at	3′ at	genes
Pgo-1-1	NZ_APLF01000002.1	-	80877	80813	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1	P_2C_Liq_1.UnCty_1066413	-	280	216	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-2	SL_9KL_010_SED_10540992	+	126	190	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-3	JGI11876J14442_10000003	+	205280	205344	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Pto-1-1	NC_018721.1	+	147626	147690	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ptr-1-1	NZ_KB905343.1	-	600481	600417	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-4	JGI1221J11331_1000106	-	12367	12303	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-5	P_1C_Liq_1.UnCty_1089716	-	107	43	RNA→
env-6	P_1C_Liq_3.UnCty_1064543	-	231	167	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-7	P_1C_Liq_1.UnCty_1008265	+	1415	1479	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-8	P_2C_Liq_1.UnCty_1170116	+	90	154	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Mod-8-1	NZ_CM001437.1	-	1513261	1513195	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
M[o-1-1	NZ_JH815539.1	+	176108	176174	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-9	JGI20156J14371_10110659	-	680	612	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-10	JGI20159J14440_10000064	-	3008	2940	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-11	JGI20160J14292_10230840	+	25	93	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-12	JGI20155J14468_10405117	-	344	276	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-13	JGI20159J14440_10135058	+	106	174	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-14	JGI20155J14468_10023041	-	280	212	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-15	CAM_READ_0235006571	-	166	99	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-16	3300001592_10000361	-	46071	46015	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-17	P_2C_Liq_1.UnCty_1027718	+	347	414	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fbr-1-1	NC_016001.1	-	1162758	1162692	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-18	JGI25922J50271_10000339	-	8516	8450	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-19	JGI25921J50272_10046219	-	307	241	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-20	soil_XZS65148_x1	-	304	236	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-21	BS_KBA_SWE21_205m_10189866	+	318	376	RNA→
env-22	CEUB01052019.1	+	160	227	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-23	CEOP01451304.1	+	607	674	RNA→ rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→

env-24	CETG01141171.1	+	474	541	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-25	CETM01278025.1	+	477	544	RNA→	
Fba-9-1	NZ_AFPK01000014.1	+	150749	150814	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-26	CEOM01058151.1	-	607	540	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-27	JGI25913J50563_1244176	+	71	137	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-28	CETR01087310.1	-	18809	18745	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-29	CEVJ01009927.1	+	44140	44204	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-30	CEVK01027416.1	-	18585	18521	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-31	CEVM01013066.1	+	53334	53398	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-32	CEVO01125175.1	+	10666	10730	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-33	CEVQ01101129.1	+	770	834	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-34	JGI20154J14316_10054052	-	581	522	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-35	JGI20157J14317_10003423	-	3710	3651	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-36	DelMOSum2010_c10728123	-	223	164	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-37	JCVL_SCAF_1096627992251	+	1032	1089	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-38	2236876001_130459	+	242	300	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-39	DelMOSum2010_c10011046	-	5729	5669	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-40	DelMOSum2011_c10604815	-	74	14	RNA→	
env-41	DelMOSum2011_c10341564	+	308	368	RNA→	
env-42	JGI24723J26617_10012210	-	2791	2732	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-43	JGI25925J51416_10027951	+	789	854	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Myu-1-1	NZ_JPFK01000007.1	-	20817	20726	RNA→	rpsO (PRK05626)RpsO (COG0184)→ hypo→ hypo→
env-44	CERM01235517.1	+	1791	1859	RNA→	
env-45	M3P_c10006697	-	1022	954	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-46	JGI25913J50563_1345866	+	57	125	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-47	_GVICOHK01AKHQ1	+	147	215	RNA→	
env-48	GXP7IEG01BCPE8	+	165	233	RNA→	
env-49	TFO_HY_Contig_16695	-	374	310	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-50	ATED1026_F5B15RW02JR6D3	+	134	198	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-51	JGI20157J14317_10000285	+	5024	5082	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-52	SA_S1_NOR08_45m.c10119203	-	441	384	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-53	20090826-Illumina_contig28958	-	458	392	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Fsa-1-1	NZ_AVFO01000002.1	+	264122	264190	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fca-1-1	NZ_AVBIO1000015.1	-	13067	12999	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fca-1-2	NZ_JRLU01000001.1	-	375317	375249	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-54	CESA01099157.1	+	266	332	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-55	CESN01196738.1	+	1485	1551	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-56	CESP01155747.1	+	1403	1469	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-57	CEVS01034257.1	-	7704	7638	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-58	CEVU01127351.1	+	981	1047	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-59	LBBO01003853.1	+	546	600	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-60	JGI20157J14317_10520585	-	115	48	RNA→	
env-61	JGI20152J14361_10102081	+	445	512	RNA→	hypo→
env-62	JGI20154J14316_10389205	+	184	251	RNA→	
env-63	JGI20153J14295_10154293	+	431	498	RNA→	hypo→
env-64	JGI20153J14318_10154293	+	431	498	RNA→	hypo→
env-65	DelMOSum2010_c10048941	-	1015	948	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-66	JGI20152J14361_10018736	+	1929	1996	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-67	DelMOSum2011_c10028302	-	2345	2278	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-68	JGI20152J14361_10074584	-	336	269	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-69	JCVL_SCAF_1096626866200	-	228	161	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-70	2236876010_0476296	+	34	101	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-71	DelMOSum2010.c10114672	-	927	860	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-72	JGI20156J14371_10028011	+	1695	1762	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-73	JGI20154J14316_10016589	-	2489	2422	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-74	JGI20160J14292_10093798	+	200	267	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-75	JGI20157J14317_10004874	-	1379	1312	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-76	JGI20152J14361_10042016	+	1197	1264	RNA→	
env-77	JGI20153J14295_10052012	+	1350	1417	RNA→	
env-78	JGI20153J14318_10052012	+	1350	1417	RNA→	
env-79	PML_READ_00443584	-	242	175	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-80	PML_READ_00298684	+	75	143	RNA→	
env-81	CESE01042213.1	-	314	247	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-82	CESJ01033522.1	+	13583	13650	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-83	CESJ01015177.1	+	5814	5881	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-84	CESU01002158.1	-	2307	2240	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-85	JGI20152J14361_10001968	-	123	56	RNA→	
env-86	JGI20154J14316_10153966	-	465	398	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-87	JGI20153J14295_10006772	-	4012	3945	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-88	JGI20153J14318_10006772	-	4012	3945	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-89	CERM01030429.1	-	985	918	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-90	CESE01041678.1	-	313	247	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-91	CEST01086311.1	+	5957	6023	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-92	CEQA01115990.1	+	458	525	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-93	TahiMoana_1000156	-	8657	8590	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-94	JGI24723J26617_10000024	-	87111	87044	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-95	CENR01073469.1	-	3738	3671	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-96	CENX01105912.1	-	734	680	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-97	CEOP01457717.1	+	2903	2957	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→
env-98	CEOF01208035.1	-	315	261	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-99	P_1C_Liq_1_UnCty_1000027	-	17086	17028	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ TonB (COG0810)tonB_Cterm (TIGR01352)→
env-100	P_2C_Liq_1_UnCty_1195289	+	93	151	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-101	JCVL_SCAF_1101667010888	+	552	612	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-102	CERI01036223.1	-	4293	4241	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-103	CENP01014601.1	+	918	969	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-104	CENX01209556.1	-	1161	1110	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-105	CEOF01432258.1	+	505	556	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-106	CEOK01358130.1	+	1063	1114	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-107	CETK01306832.1	-	576	524	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-108	CESW01023746.1	+	683	736	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-109	CESP01265619.1	+	546	598	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Min-1-1	NZ_BAEX01000001.1	+	19959	20024	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-110	CESJ01281228.1	-	803	743	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-111	SA_S1_NOR05_45m.c10263701	+	212	278	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-112	SA_S1_NOR08_45m.c10224370	+	426	492	RNA→	
env-113	SA_S1_NOR05_45m.c10350149	+	212	278	RNA→	
env-114	SA_S1_NOR08_45m.c10075071	+	209	275	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-115	SA_S2_NOR15_50m.c10328732	+	371	437	RNA→	
env-116	P_2C_Liq_1_UnCty_1015831	+	1190	1252	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Nul-1-1	NZ_BBMM01000004.1	-	180573	180485	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

Nul-1-2	NZ_BBNT01000011.1	-	28548	28460	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fba-1-1	NZ_CH672374.1	+	1359719	1359807	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Nul-1-3	NZ_JPJI01000032.1	-	1047570	1047482	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Nul-1-4	NZ_BBMJ01000005.1	-	254727	254639	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Nul-1-5	NZ_BBMK01000001.1	+	51054	51142	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Nul-1-6	NZ_BBLG01000005.1	-	173187	173099	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-117	P_2C_Liq_1_UnCty_1000001	+	20247	20338	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-118	P_2C_Liq_2_UnCty_1019503	+	802	893	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-119	CEOM01017949.1	-	2624	2561	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-120	CENX01076851.1	-	336	273	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-121	CEOF01146199.1	+	578	641	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
Fsu-1-1	NZ_AUGP01000017.1	+	428051	428115	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsu-1-2	NZ_JRLY01000002.1	-	230583	230519	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Gsp-1-1	NZ_AMSG01000007.1	+	33255	33321	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-122	JGI11876J14442_11183631	+	151	208	RNA→	
env-123	JGI11876J14442_10280383	-	423	359	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-124	CETRO1192788.1	-	196	132	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-125	SI60aug11_200m.c1160499	-	131	66	RNA→	rpsO (PRK05626)→
env-126	2236876001_545617	+	56	124	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-127	4491417.3_NODE.64483	+	5852	5910	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-128	SRS052697_C3073829	+	11	69	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-129	scaffold49704_5_MH0038	+	198	256	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-130	SRS024435_C2966745	+	226	284	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-131	KGL_S1_ANT01_95m.c10061386	+	974	1038	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-132	KGL_S1_ANT02_95m.c10009452	-	2499	2435	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-133	CESB01280198.1	-	828	770	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-134	TB_GS09_5_10008900	-	6175	6110	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-135	JGI20154J14316_10009605	-	4721	4654	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-136	JGI20153J14295_10017197	+	805	872	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-137	JGI20153J14318_10017197	+	805	872	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-138	DelMOSum2010.c10000887	-	4525	4458	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-139	DelMOSum2011.c10406029	-	342	275	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-140	SI36aug09_100m.1134333	-	170	103	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-141	JGI20154J14316_10002772	+	14364	14431	RNA→	rpsO (PRK05626)→
env-142	JGI20160J14292_10003420	+	11666	11733	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-143	JGI20153J14295_10019149	-	130	63	RNA→	rpsO (PRK05626)→
env-144	JGI20153J14318_10019149	-	130	63	RNA→	rpsO (PRK05626)→
env-145	JGI20157J14317_10004310	-	467	400	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-146	JGI20160J14292_10025459	-	466	400	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-147	DelMOSum2011.c10000072	+	60905	60972	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-148	JGI20160J14292_10243857	+	387	454	RNA→	hypo→
env-149	JGI20153J14295_10195907	-	246	179	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-150	JGI20153J14318_10195907	-	246	179	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-151	2236876010_0615026	-	87	20	RNA→	
env-152	JGI20154J14316_10005663	+	965	1032	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-153	DelMOSum2010.c10007098	-	7581	7514	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-154	SI34jun09_10m.1109894	+	227	294	RNA→	hypo→
env-155	DelMOSum2010.c10176236	-	322	255	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-156	DelMOSum2010.c10534266	+	94	161	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-157	DelMOSum2010.c10110255	-	223	156	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-158	LPaug08P2610m.c1011541	+	445	512	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-159	JGI20153J14295_10000898	+	23567	23634	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-160	JGI20153J14318_10000898	+	23567	23634	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-161	DelMOSum2011.c10006148	+	4842	4908	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-162	JGI20154J14316_10039500	+	1690	1757	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-163	JGI20157J14317_10001809	+	18612	18679	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-164	JGI20157J14317_10230393	-	112	45	RNA→	
env-165	CESU01027531.1	-	2628	2561	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-166	AntarcticL_1233742	+	29	96	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-167	JGI20154J14316_10002676	-	481	414	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-168	JGI20153J14295_10002037	-	495	428	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-169	JGI20153J14318_10002037	-	495	428	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-170	JGI20157J14317_10482150	-	149	82	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-171	DelMOSum2010.c10084194	+	926	993	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-172	JGI20157J14317_10001466	+	8836	8903	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-173	DelMOSum2010.c10625437	+	182	249	RNA→	
env-174	CESI01018756.1	-	84	17	RNA→	
env-175	CESU01045154.1	-	572	505	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-176	JGI20154J14316_10053478	-	87	20	RNA→	
env-177	JGI20154J14316_10077664	+	1096	1163	RNA→	
env-178	JGI20157J14317_10014000	+	4902	4969	RNA→	
env-179	JGI20157J14317_10311427	+	322	389	RNA→	
env-180	DelMOSum2010.c10437430	+	283	350	RNA→	←hypo
env-181	JGI20156J14371_10063188	-	538	471	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-182	JGI20160J14292_10007193	+	2729	2796	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-183	JGI20153J14295_10004189	+	1692	1759	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-184	JGI20153J14318_10004189	+	1692	1759	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-185	DelMOSum2010.c10470294	-	79	12	RNA→	←hypo
env-186	DelMOSum2010.c10178987	+	509	576	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-187	JGI20153J14295_10013902	+	4069	4136	RNA→	
env-188	JGI20153J14318_10013902	+	4069	4136	RNA→	
env-189	JGI20153J14295_10133651	-	491	425	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-190	JGI20153J14318_10133651	-	491	425	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-191	JGI20154J14316_10101586	-	128	62	RNA→	
env-192	JGI20160J14292_10004452	+	816	882	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-193	JGI20153J14295_10014690	+	3555	3621	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-194	JGI20153J14318_10014690	+	3555	3621	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-195	JGI20154J14316_10305977	+	282	348	RNA→	
env-196	JGI20157J14317_10001080	+	26023	26090	RNA→	rpsO (PRK05626)→
env-197	DelMOSum2010.c10351914	-	182	115	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-198	JGI20154J14316_10018926	-	1714	1647	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-199	JGI20160J14292_10001541	-	464	397	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-200	JGI20160J14292_10012905	+	4746	4813	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-201	CESI01128275.1	-	83	16	RNA→	
env-202	CESU01085162.1	+	222	289	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-203	CENJ01024989.1	-	40023	39970	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-204	CEOK01177274.1	-	588	535	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_I (cd11363)PRK11824 (PRK11824)→
env-205	CEVN01281347.1	+	297	350	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-206	CEVZ01405612.1	-	177	124	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-207	CETH01159915.1	-	862	809	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-208	CETM01029131.1	+	33254	33307	RNA→	rpsO (PRK05626)RpsO (COG0184)→ RNase_PH_PNPase_I (cd11363)PRK11824 (PRK11824)→
env-209	CEUL01222522.1	+	158	211	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-210	CEVL01135957.1	+	141	194	RNA→	rpsO (PRK05626)RpsO (COG0184)→

env-211	CETL01011955.1	-	471	418	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-212	CESZ01084417.1	-	85	17	RNA→	
env-213	LGVF01484185.1	+	293	357	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-214	LGOV01011148.1	+	10676	10740	RNA→	rpsO (PRK05626)RpsO (COG0184)→ hypo→
env-215	LGVD01117462.1	+	298	362	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-216	3300001239.10037134	+	37	106	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-217	3300001605.10046264	-	862	793	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-218	CESI01059016.1	+	1093	1152	RNA→	
env-219	CESU01035381.1	+	515	574	RNA→	
env-220	LWAnNN_GHFF8UE02IP5ZP	-	108	47	RNA→	hypo→
env-221	JGI24768J34885.10063673	-	1068	1001	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-222	JGI24768J34885.10402764	-	304	237	RNA→	rpsO (PRK05626)Ribosomal_S15p_S13e (cd00353)→
Fli-1-1	NZ_AVGG01000002.1	+	225714	225782	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Gme-1-1	NZ_AUHD01000001.1	-	60972	60906	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→ hypo→
env-223	topACOD.F95O9CU01BVTXN	-	187	122	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-224	JGI25914J50564.10243922	+	296	364	RNA→	
env-225	JGI25930J51415.1071170	+	134	202	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-226	JGI12421J11937.10355000	+	222	290	RNA→	
env-227	JGI12421J11937.10090896	+	762	830	RNA→	
env-228	JGI12421J11937.10098907	+	706	774	RNA→	
env-229	JGI24768J34885.10985290	+	138	206	RNA→	
env-230	JGI25910J50241.10014301	-	1797	1729	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-231	JGI25920J50251.10021433	+	1008	1076	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-232	JGI25911J50253.10009747	+	2185	2253	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-233	JGI25912J50252.10017251	+	1608	1676	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-234	JGI25919J51413.1008186	+	196	264	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-235	JGI12421J11937.10068959	-	121	53	RNA→	
env-236	JGI25914J50564.10005894	+	1142	1210	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-237	JGI25925J51416.10005604	+	1735	1803	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-238	JGI25910J50241.10558763	-	157	89	RNA→	hypo→
env-239	CEVJ01089541.1	+	746	812	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-240	CEVK01107692.1	+	697	763	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-241	CEVM01127682.1	-	8640	8574	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-242	CEVO01247303.1	-	757	691	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-243	CEVQ01258568.1	+	523	589	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-244	P.1C.Liq.3.UnCty_1003320	-	752	689	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-245	P.1C.Liq.1.UnCty_1001124	+	88	151	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-246	P.1C.Liq.2.UnCty_1013913	-	483	420	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-247	P.1C.Liq.2.UnCty_1115639	-	112	49	RNA→	
env-248	GSLASAS_GLMUJHB02IJCCC	-	69	6	RNA→	
env-249	P.1C.Liq.1.UnCty_1006195	-	740	677	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-250	P.2C.Liq.1.UnCty_1185669	+	181	244	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-251	CEQG01151576.1	-	14001	13934	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-252	CERQ01228901.1	+	560	627	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-253	CETB01276978.1	+	270	337	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-254	CETR01042174.1	+	13985	14052	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-255	CEQS01121120.1	-	530	463	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-256	CEVH01121698.1	+	336	403	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-257	JCVL_SCAF_1096627482312	+	478	545	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-258	CEQG01262115.1	+	449	514	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-259	CEVM01147883.1	+	152	217	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-260	CEVO01240128.1	-	371	306	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-261	CEVJ01132551.1	+	371	436	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Nma-1-1	NZ_AP014548.1	-	1343589	1343499	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-262	topACOD_F95O9CU02GIL5N	-	178	115	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-263	CEVX01088623.1	-	401	336	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-264	CENF01080549.1	-	982	917	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-265	CEVP01232759.1	+	45	110	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-266	CEQE01251909.1	+	229	292	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-267	CERQ01096008.1	-	324	261	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-268	CEUY01328535.1	+	133	196	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-269	JGI11881J13070_1009257	-	658	595	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-270	JGI12148J13107_117495	+	102	165	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-271	CETU01138396.1	+	53	116	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-272	CEVI01059114.1	-	539	476	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Mmo-1-1	NZ_KE384013.1	-	343223	343160	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-273	SRS016095_C2559685	+	1214	1274	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-274	SRS019968_C2017240	-	402	342	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-275	SRS064557_C1810798	-	387	327	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-276	CENF01212627.1	+	1179	1247	RNA→	rpsO (PRK05626)RpsO (COG0184)→ hypo→
env-277	CERG01152242.1	+	414	482	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-278	CERR01009272.1	-	2063	1995	RNA→	rpsO (PRK05626)RpsO (COG0184)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-279	CERV01011610.1	+	2857	2925	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-280	CETB01333319.1	-	576	508	RNA→	rpsO (PRK05626)RpsO (COG0184)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-281	CERB01165146.1	-	781	714	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-282	CEUN01041406.1	+	479	546	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-283	CEUQ01052428.1	+	476	543	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-284	CEVZ01245147.1	+	1848	1915	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-285	CEVA01049874.1	-	671	604	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-286	CENY01189203.1	+	413	480	RNA→	
env-287	CEOQ01377130.1	-	582	515	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-288	CETG01040803.1	+	479	546	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-289	CEPK01084254.1	-	717	650	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-290	CETB01107343.1	-	567	500	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-291	CETM01027306.1	-	537	470	RNA→	rpsO (PRK05626)RpsO (COG0184)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-292	CEUS01161241.1	+	657	724	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-293	CEUZ01497389.1	-	394	327	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-294	CETW01247773.1	-	486	419	RNA→	rpsO (PRK05626)RpsO (COG0184)→ hypo→
env-295	CEUY01024920.1	+	693	760	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-296	CEVN01169446.1	-	230	163	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-297	CERB01253177.1	-	256	189	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-298	CETP01182766.1	+	1115	1170	RNA→	
env-299	CEUW01218718.1	-	377	322	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-300	CEUF01031262.1	-	3989	3934	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-301	CEUG01214040.1	-	119	64	RNA→	hypo→
env-302	CETK01110687.1	-	61390	61335	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-303	CETL01064018.1	-	538	483	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-304	CESW01089027.1	+	96	152	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-305	CAM_READ_0234091691	-	79	24	RNA→	
env-306	CESZ01040152.1	+	353	408	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-307	CESA01198900.1	+	376	431	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-308	CEQS01074332.1	-	162559	162500	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→

Lsp-3-1	NZ_JHZY01000002.1	-	172107	172041	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-309	CEVM01090294.1	-	285	219	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-310	CETA01052158.1	+	5065	5131	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-311	CETB01058157.1	+	1085	1151	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-312	CEVJ01090841.1	-	927	861	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-313	CETU01159611.1	-	800	734	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-314	CETT01019050.1	+	500	566	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-315	CEVK01011741.1	-	496	430	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-316	CERQ01230915.1	-	1011	945	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-317	CEUY01464639.1	-	77	11	RNA→	
env-318	CEPD01093744.1	-	461	395	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-319	CERY01058984.1	-	449	383	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-320	CEPZ01179059.1	+	369	435	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-321	CERE01075129.1	+	1132	1198	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-322	CESC01013190.1	+	80317	80383	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-323	CEUN01016453.1	+	2805	2871	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Lbl-1-1	NZ_CH672395.1	-	1099698	1099632	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-324	CETS01234391.1	+	379	445	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-325	CEWI01015492.1	-	496	430	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-326	CEOS01054411.1	-	238	172	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fri-1-1	NZ_KB899968.1	-	97102	97037	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fri-2-1	NZ_JRLX01000004.1	+	133005	133070	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-327	JCVI_SCAF_1096626847824	+	1625	1679	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-328	CETY01060541.1	-	800	747	RNA→	PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH.C (pfam03725)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-329	CESE01249388.1	+	30	85	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-330	CESJ01046981.1	+	6198	6253	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-331	CEVF01245326.1	+	262	318	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-332	JCVI_SCAF_1096628209080	-	1575	1519	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-333	CEUA01276370.1	-	476	420	RNA→	rpsO (PRK05626)RpsO (COG0184)→ hypo→
env-334	CESJ01065949.1	-	404	345	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-335	GSLAS_GBFBV41Z02H1HZP	+	224	282	RNA→	
env-336	GSLSAAL_GFP0ZZ301DBBHK	-	358	298	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-337	JGI11876J14442_10048055	+	1753	1811	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-338	JCVL_READ_1102140320562	+	586	640	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-339	JCVL_READ_1108829504037	+	48	102	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-340	JCVL_READ_1101733741174	-	276	222	RNA→	
env-341	CEOO01040203.1	+	631	685	RNA→	rpsO (PRK05626)→
env-342	CEWA01031860.1	+	385	439	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-343	CEOV01172242.1	+	485	539	RNA→	
env-344	CEUR01130058.1	-	88	34	RNA→	
env-345	CETK01152287.1	-	721	667	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-346	CEUG01240482.1	-	938	884	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-347	CETE01019518.1	-	64087	64033	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-348	CETQ01056045.1	-	3058	3004	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ sigma70-ECF (TIGR02937)Sigma70_r1_2 (pfam00140)Sigma70_r2 (pfam04542)→
env-349	CEUH01289173.1	-	939	885	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-350	CEWG01025700.1	+	54379	54433	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-351	CEWH01036275.1	-	2198	2144	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-352	CEVG01088667.1	+	633	687	RNA→	rpsO (PRK05626)→
env-353	CEWJ01239071.1	-	240	186	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-354	CEVH01159213.1	+	181	235	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-355	CEPT01275949.1	-	108	54	RNA→	
env-356	CEUM01290778.1	+	535	589	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-357	PBR_1004362	-	413	348	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fta-1-1	NC_015321.1	+	2727109	2727174	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-358	KGLS1_ANT02_95m.c10279369	-	384	320	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-359	P_1C_Liq_1_UnCty_1146961	+	178	240	RNA→	
env-360	P_2C_Liq_1_UnCty_1109790	-	320	258	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-361	SL_7KL_010_BRINE_10000173	-	3812	3748	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-362	SL_9KL_010_SED_10000238	+	12358	12422	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Mod-7-1	NZ_AYMS01000053.1	-	7079	7009	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Mod-6-1	NZ_JH590839.1	+	306818	306888	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Mod-5-1	NZ_JH815537.1	+	340698	340768	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Mod-2-1	NZ_KE161017.1	+	300297	300367	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Msp-3-1	NZ_CP010327.1	-	814045	813975	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Mod-3-1	NZ_KE340321.1	+	302906	302976	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Mpr-1-1	NZ_CP010817.1	-	3674296	3674226	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Mod-4-1	NZ_JH590835.1	-	245456	245386	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Mod-1-1	NZ_JWJO01000006.1	+	753	821	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fin-1-1	NC_017025.1	+	2426652	2426716	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-363	JGI25910J50241_10022696	+	1815	1881	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-364	JGI25910J50241_10032142	-	1405	1339	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-365	JGI25911J50253_10054721	+	193	259	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-366	JGI25908J49247_10520374	+	33	99	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-367	JGI25920J50251_10045732	+	42	108	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-368	JGI25910J50241_10027611	-	1889	1823	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-369	P_1C_Liq_1_UnCty_1013506	+	698	774	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-370	P_2C_Liq_1_UnCty_1023963	+	685	761	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-371	P_2C_Liq_2_UnCty_1019436	+	188	264	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-372	P_1C_Liq_2_UnCty_1015786	-	536	460	RNA→	PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→ rpsO (PRK05626)RpsO (COG0184)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-373	CENP01234479.1	+	54048	54107	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-374	CEOK01051128.1	+	11806	11865	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-375	CEOF01428303.1	+	1460	1519	RNA→	
env-376	CERM01056288.1	-	643	576	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-377	CERM01008643.1	+	3284	3351	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-378	CEVX01053585.1	+	2992	3059	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-379	CESF01002239.1	-	6290	6222	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-380	CESO01109506.1	-	5554	5486	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-381	CETY01366948.1	+	307	375	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-382	CESM01460641.1	+	62	130	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-383	CEVP01299765.1	+	326	394	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-384	CEWG01217676.1	+	305	373	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-385	CERK01085407.1	+	265	333	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-386	CERW01016535.1	+	3627	3695	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-387	CESA01134118.1	+	1636	1704	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-388	CEVX01008274.1	+	4128	4196	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-389	CERM01128748.1	+	189	257	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-390	JCVL_SCAF_1096627802799	+	1198	1266	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-391	CEOM01115757.1	-	1876	1808	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-392	CEWK01131420.1	+	392	460	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-393	CESW01060567.1	-	673	605	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-394	CEOM01357113.1	+	580	648	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-395	CESP01222974.1	-	266	198	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-396	CEST01081216.1	-	179	120	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-397	NCBL_READ_1112532322036	+	335	394	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-398	NCBL_READ_111277362018	+	412	471	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-399	NCBL_READ_1112533192499	-	730	671	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-400	CESE01040916.1	+	2914	2973	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-401	CESJ01014804.1	-	376	317	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-402	CESN01055916.1	-	278	222	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-403	CESP01147131.1	-	157	101	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-404	CESW01247893.1	+	149	205	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-405	CETY01067238.1	-	908	856	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-406	CEOP01095216.1	-	241	189	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-407	CEUR01327391.1	+	1009	1065	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-408	CEWJ01231416.1	-	68	12	RNA→	
env-409	CAM_READ_0231777305	+	246	302	RNA→	hypo→
env-410	CAM_READ_0233120627	+	246	302	RNA→	
env-411	CEOK01184894.1	-	9274	9218	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-412	CESP01118836.1	+	165	221	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-413	JCVL_SCAF_1096628396118	+	1238	1294	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-414	CENP01152184.1	-	17026	16970	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-415	CESI01270948.1	+	837	890	RNA→	
env-416	CESI01305757.1	+	1479	1532	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-417	CESU01062348.1	+	413	466	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-418	CESJ01175686.1	-	363	309	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fbe-1-1	NZ_JRLV01000023.1	-	16228	16166	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-419	CERZ01029826.1	-	671	607	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ksp-1-1	NC_015496.1	+	583327	583390	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Dsp-2-1	NZ_CM001837.1	+	492542	492605	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Dsp-1-1	NZ_CP009301.1	+	1271436	1271503	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ddo-1-1	NZ_JSAQ01000001.1	+	1202154	1202221	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Iha-1-1	NZ_AJJU01000004.1	+	333125	333187	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-420	CENJ01055151.1	-	1153	1089	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-421	LPaug09P1610m_c1073129	-	145	81	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-422	A09P0410a_Sequence0000045006	+	360	424	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-423	CEOM01146924.1	-	65	1	RNA→	
env-424	CENN01066147.1	+	1036	1100	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-425	CENU01000611.1	-	5201	5137	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-426	CEOK01054851.1	-	1174	1110	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-427	CENP01019191.1	+	2058	2122	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-428	CENU01173310.1	-	367	303	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-429	CESS01087722.1	-	2995	2931	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-430	JCVL_SCAF_1096627377572	+	2760	2824	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-431	CEOK01021460.1	-	1198	1134	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-432	CENJ01182900.1	+	248	312	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-433	CENU01105541.1	+	758	822	RNA→	
env-434	CEOM01022458.1	-	1511	1447	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→

env-435	JCVL_SCAF_1096627389939	+	60590	60654	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-436	CENG01086864.1	-	453	389	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-437	CENN01059376.1	-	230	166	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-438	CESW01265115.1	+	247	311	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-439	CEOM01082955.1	+	4838	4902	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-440	CENP01061027.1	+	20726	20790	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-441	CENU01097470.1	-	401	337	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-442	CENX01202860.1	-	8088	8024	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-443	CEOF01213869.1	+	2775	2839	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-444	CEOK01043507.1	+	75	139	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
Kje-1-1	NZ_LBMG01000021.1	-	84468	84404	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Kal-1-1	NZ_DS544873.1	-	4807475	4807411	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Kzh-1-1	NZ_LBMH01000003.1	+	156456	156520	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-445	JCVL_SCAF_1096627449837	+	1096	1163	RNA→	rpsO (PRK05626)→
env-446	CEQG01221456.1	-	120	62	RNA→	rpsO (PRK05626)→
env-447	CEQY01168872.1	+	258	316	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-448	CERC01134264.1	+	7325	7383	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-449	P_2C_Liq_1_UnCty_1172006	+	238	295	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-450	CEOO01008234.1	+	2508	2575	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-451	CESA01225116.1	+	184	251	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-452	CESZ01040124.1	-	244	177	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-453	CESZ01039937.1	-	243	177	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-454	CEOM01051750.1	-	464	397	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-455	CEVU01350716.1	-	629	562	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-456	P_2C_Liq_1_UnCty_1017278	-	872	816	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-457	P_2C_Liq_2_UnCty_1110420	-	101	45	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-458	GQKUMWE01EWSJM	+	239	300	RNA→	← hypo
env-459	CENT01012923.1	-	2675	2616	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-460	CERW01249250.1	+	463	522	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-461	CEVS01053715.1	-	327	268	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-462	CEOP01008691.1	-	1501	1441	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-463	CEVP01023094.1	+	259	319	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-464	JCVL_READ_1104230391553	+	800	860	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-465	JCVL_READ_1104230226763	-	664	604	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-466	CETQ01008005.1	-	1003	943	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-467	CESF01056087.1	+	108	168	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-468	CESO01047575.1	-	1806	1746	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-469	CEWG01134969.1	+	150	210	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-470	CESM01335079.1	-	449	389	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-471	JGI25920J50251_10101252	-	633	565	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-472	2236876001_042780	-	239	185	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-473	SI34jun09_10m_1003614	-	2745	2691	RNA→	rpsO (PRK05626)RpsO (COG0184)→ Pnp (COG1185)PRK11824 (PRK11824)→ PRK09210 (PRK09210)Sigma70_r1_2 (pfam00140)→
env-474	2236876001_503295	+	35	89	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-475	LAZR01010698.1	-	870	806	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-476	JGI20160J14292_10000017	-	161918	161862	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-477	JGI20156J14371_10003440	+	5695	5749	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-478	JGI20157J14317_10056873	+	532	586	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-479	JGI20159J14440_10211892	+	222	276	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-480	CESJ01009412.1	-	295	238	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-481	DelMOSum2010.c10003273	+	6417	6474	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-482	JGI20154J14316_10013644	+	4557	4614	RNA→	rpsO (PRK05626)RpsO (COG0184)→

env-483	JGI20157J14317_10026517	+	2621	2678	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-484	JGI20153J14295_10010421	-	315	258	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-485	JGI20153J14318_10010421	-	315	258	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-486	2236876001_158288	-	282	226	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-487	JGI20152J14361_10115381	+	161	218	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-488	JGI20160J14292_10003695	-	5908	5851	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-489	CESI01136105.1	-	853	796	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-490	DelMOSum2010_c10699725	-	59	2	RNA→
env-491	JGI20152J14361_10001110	+	2581	2638	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-492	JGI20156J14371_10001772	+	5804	5861	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-493	JGI20154J14316_10024766	+	2744	2801	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-494	JGI20160J14292_10090187	-	774	717	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-495	JGI20157J14317_10011759	-	3922	3865	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-496	JGI20153J14295_10003124	+	11087	11144	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-497	JGI20153J14318_10003124	+	11087	11144	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-498	JGI20153J14295_10020066	-	1717	1660	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-499	JGI20153J14318_10020066	-	1717	1660	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-500	JGI20159J14440_10267556	+	379	436	RNA→ ←-hypo
env-501	JGI20154J14316_10180509	+	119	176	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-502	CERI01279172.1	+	1860	1917	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-503	CEGC01022181.1	+	362	426	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-504	CEQG01070770.1	-	2992	2928	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-505	CEQQ01079414.1	+	374	438	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-506	CEPG01012475.1	-	616	548	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-507	P_1C_Liq_2_UnCty_1052240	-	318	260	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-508	P_1C_Liq_1_UnCty_1125732	-	94	36	RNA→
env-509	P_2C_Liq_1_UnCty_1007508	+	1871	1929	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-510	P_2C_Liq_2_UnCty_1069522	-	283	225	PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-511	ElkS_mat_MD6A_1029892	-	674	608	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-512	JGI11876J14442_10002542	+	13284	13350	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fhi-1-1	NZ_JPRK01000005.1	+	251976	252039	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsp-9-1	NZ_JARP01000002.1	-	708129	708066	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Asu-1-1	NC_018013.1	+	528300	528368	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Aca-1-1	NZ_AUBG01000007.1	-	10769	10702	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-513	JGI24723J26617_10077130	-	289	222	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-514	JGI24723J26617_10048522	+	1324	1391	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-515	CERO01082754.1	+	566	633	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-516	CERP01000066.1	-	89558	89491	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-517	CERU01094717.1	+	740	807	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Avl-1-1	NZ_JSVU01000005.1	+	248306	248373	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-518	CERY01108911.1	+	730	797	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-519	JGI24723J26617_10269373	-	259	192	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-520	JGI24723J26617_10077183	-	289	222	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-521	CEVN01317104.1	+	431	498	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-522	JGI24723J26617_10004896	+	8365	8432	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-523	CENR01030012.1	+	19705	19772	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-524	CEOG01036059.1	+	11314	11381	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-525	CERJ01077310.1	+	15535	15602	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-526	CERN01056527.1	+	206606	206673	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-527	CERO01015055.1	-	94	27	RNA→
env-528	CETB01099781.1	-	934	867	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-529	CETRO1093448.1	-	3881	3814	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-530	CEVM01236749.1	-	847	780	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-531	CEVO01146838.1	-	280	213	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-532	JGI24723J26617_10024902	-	107	40	RNA→	
env-533	JGI24723J26617_10051817	-	111	44	RNA→	
env-534	CENX01022829.1	+	1733	1788	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ sigma70-ECF (TIGR02937)Sigma70_r1_2 (pfam00140)Sigma70_r2 (pfam04542)→
env-535	CEOF01084231.1	+	2913	2968	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-536	CENP01067191.1	-	87	32	RNA→	
env-537	CENG01112007.1	+	4191	4246	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-538	CENU01401332.1	+	472	527	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-539	CENJ01312050.1	-	97	42	RNA→	
env-540	CENP01044677.1	+	77	132	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
Apa-1-1	NZ_JACC01000030.1	-	38381	38316	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Ama-1-1	NZ_JACA01000052.1	-	55849	55785	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Aat-1-1	NZ_AQRA01000003.1	-	469802	469738	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ame-1-1	NZ_JACB01000015.1	+	60959	61023	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ala-1-1	NZ_KE387187.1	+	63041	63106	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Amu-1-1	NZ_AUML01000001.1	-	274510	274444	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Fsu-3-1	NZ_AUCZ01000003.1	+	320199	320263	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsu-3-2	NZ_JRLW01000014.1	+	90546	90610	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fen-1-1	NZ_AVCS01000009.1	-	299934	299870	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fen-1-2	NZ_JRLZ01000004.1	+	212529	212593	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fco-1-1	NC_016510.2	+	875063	875127	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-541	JGI24770J26754_10043964	+	1074	1138	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-542	JGI25913J50563_1022430	-	297	233	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-543	LWAEeNNiSIP_GDP3C2T02IBMEZ	-	77	13	RNA→	
env-544	LWAnNN.GDP3C2T02IBMEZ	-	77	13	RNA→	
env-545	JGI25920J50251_10102258	+	416	480	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-546	TDF_OR_ARG04_113m.c1238479	-	103	38	RNA→	
Fps-1-1	NZ_CP010278.1	+	2255345	2255410	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fps-1-2	NZ_CP010276.1	+	2300567	2300632	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fps-1-3	NZ_CP010274.1	+	2298136	2298201	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Jma-1-1	NZ_JH651379.1	-	1502761	1502696	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-547	KVRMV2_100016903	-	110	57	RNA→	
env-548	CEQT01124934.1	-	606	550	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-549	CEVG01326867.1	+	310	366	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-550	CEQI01034781.1	+	143	199	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-551	P_2C_Liq_1_UnCty_1000352	+	10687	10752	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-552	P_2C_Liq_2_UnCty_1001631	-	4100	4035	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-553	P_2C_Liq_3_UnCty_100392	+	7024	7089	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-554	JGI20153J14295_10009471	-	2396	2331	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-555	JGI20153J14318_10009471	-	2396	2331	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-556	JCVL_SCAF_1096626865111	-	109	44	RNA→	
env-557	JGI20154J14316_10022771	+	940	1005	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ffi-1-1	NZ_KE384381.1	+	65930	65995	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-558	JGI24768J34885_10768442	+	60	125	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-559	JGI20156J14371_10000091	-	48791	48726	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-560	JGI20154J14316_10038808	-	884	819	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-561	DelMOWin2010_c10012594	-	4166	4099	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-562	SI48aug10_10m.c1029846	+	215	282	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-563	JGI20160J14292_10046285	-	129	62	RNA→	
env-564	JGI20155J14468_10071765	-	979	912	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-565	DelMOSum2010.c10029733	-	95	28	RNA→	
env-566	JGI20160J14292_10025745	+	2542	2609	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-567	JGI20153J14295_10164677	-	300	233	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-568	JGI20153J14318_10164677	-	300	233	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-569	JGI20151J14362_10106988	+	760	827	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-570	JGI20155J14468_10226844	-	184	117	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-571	JGI20156J14371_10017225	+	4008	4075	RNA→	
env-572	JGI20157J14317_10097956	-	992	925	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-573	JGI20159J14440_10001664	-	3899	3832	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-574	JGI20151J14362_10553745	+	192	259	RNA→	
env-575	JGI20156J14371_10055795	-	129	62	RNA→	
env-576	JGI20156J14371_10169803	+	499	566	RNA→	
env-577	JGI20157J14317_10131865	+	746	813	RNA→	
env-578	2236876007_0312397	-	171	104	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-579	DelMOSum2010.c10010162	+	1748	1815	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-580	LPaug09P1610m.c1025198	-	345	278	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-581	JGI20152J14361_10068744	+	344	411	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-582	JGI20151J14362_10030196	+	80	147	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-583	JGI20156J14371_10081935	-	1117	1050	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-584	JGI20160J14292_10175855	+	558	625	RNA→	
env-585	JGI20157J14317_10317670	+	324	391	RNA→	
env-586	JGI20155J14468_10022308	+	3140	3207	RNA→	
env-587	JGI20155J14468_10502791	-	79	12	RNA→	
env-588	JGI20158J14315_10014377	-	461	394	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-589	JGI20158J14315_10054385	+	304	371	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-590	LPjun09P1210m.c1021057	-	265	198	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-591	CESF01026423.1	-	426	359	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-592	LPaug08P2610m.c1011929	-	656	589	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-593	JGI20152J14361_10054897	+	879	946	RNA→	
env-594	JGI20153J14295_10031185	+	1241	1308	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-595	JGI20153J14318_10031185	+	1241	1308	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-596	JGI20156J14371_10287260	+	272	339	RNA→	
env-597	JGI20160J14292_10262699	-	129	62	RNA→	
env-598	JGI20154J14316_10027342	-	1569	1502	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-599	JGI20157J14317_10012354	+	3736	3803	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-600	JCVL_SCAF_1096626862538	+	155	222	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-601	JGI20156J14371_10124702	-	670	604	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-602	CESO1123227.1	-	455	390	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-603	CETY01169678.1	-	8265	8200	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-604	Antartic2_1179192	+	146	211	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-605	CEWO01136473.1	+	175	241	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-606	NCBL_READ_1112493426512	+	347	411	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-607	CESJ01083807.1	-	353	289	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-608	LPaug08P2610m.c1089043	+	81	145	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-609	JGI24816J26688_1216386	+	208	272	RNA→	
env-610	JGI24817J26689_1164217	+	175	239	RNA→	rpsO (PRK05626)RpsO (COG0184)→

env-611	CESL01010325.1	+	5005	5069	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-612	CETA01075676.1	-	752	688	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-613	SI47jul10_100m_c1098805	-	210	146	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-614	CEQF01068126.1	+	924	988	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-615	CERL01242589.1	+	2074	2138	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-616	JCVL_SCAF_1101667292350	-	651	587	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-617	CESM01026631.1	+	383	447	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-618	CEUB01079894.1	-	176	112	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-619	CESU01087378.1	+	261	325	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-620	CEVX01097219.1	+	420	484	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-621	CEWO01070284.1	-	70	6	RNA→
env-622	CEOP01011972.1	-	955	891	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-623	CERW01092002.1	-	678	614	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-624	JCVL_SCAF_1096626863907	-	2148	2084	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-625	DelMOSum2010.c10030564	-	2683	2619	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-626	JGI20156J14371_10004976	-	5364	5300	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-627	JGI20160J14292_10560358	-	67	3	RNA→
env-628	JGI20155J14468_10155867	+	228	292	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-629	CERI01034968.1	-	2137	2073	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-630	CERM01237716.1	+	160	224	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-631	CESF01120804.1	-	1011	947	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-632	CESO01082605.1	+	3598	3662	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-633	CETY01057294.1	+	812	876	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-634	CEWO01335636.1	+	832	896	RNA→
env-635	CESJ01039048.1	+	2696	2760	RNA→
env-636	LPjun09P1210m_c1043297	-	263	199	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-637	CENF01241446.1	-	475	411	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-638	LPaug09P1610m_c1079724	-	152	88	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-639	LPaug08P2610m_c1008313	-	509	445	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-640	CESI01003936.1	-	2614	2550	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-641	SI54feb11_100m_c1030638	-	504	440	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-642	SI60aug11_100m_c1000018	+	42717	42781	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (COG2377)anmK (PRK09585)→
env-643	SI47jul10_120m_c1021072	-	725	661	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-644	SI36aug09_120m_1000015	+	9032	9096	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-645	A09P04500a_Sequence0000024128	-	490	426	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-646	J09P20500a_Sequence0000027602	-	643	579	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-647	F10SI03120a_Sequence0000002163	+	5397	5461	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-648	SI39nov09_120m_c1156358	+	103	167	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-649	SI60aug11_100m_c1008765	+	593	657	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-650	SI47jul10_100m_c1000490	-	5467	5403	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-651	SI39nov09_135m_c1093920	+	131	195	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-652	SI60aug11_200m.c1241338	+	85	149	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-653	SI47jul10_135m.c1051027	-	459	395	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-654	SI34jun09_120m.1000008	-	61442	61378	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-655	SI34jun09_135m.1000014	-	50759	50695	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-656	SI39nov09_100m.1072152	-	470	406	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-657	SI36aug09_100m.1060339	+	326	390	RNA→
env-658	SI34jun09_100m.1011554	-	1665	1601	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-659	CEWR01151164.1	-	180	116	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-660	CESE01088802.1	-	353	289	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-661	CETV01112507.1	+	2433	2497	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-662	A09P041000a_Sequence0000001821	+	883	947	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-663	CESM01243490.1	+	238	303	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-664	BS_KBA_SWE12_21m.c10000131	+	18308	18374	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-665	BS_KBB_SWE26_205m.c1000040	-	13487	13421	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-666	BS_KBA_SWE07_21m.c1009901	-	943	877	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-667	BS_KBA_SWE21_205m.10000004	+	15225	15291	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-668	BS_KBA_SWE02_21m.10000008	+	18316	18382	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-669	KGL_S1_ANT02_95m.c10523594	-	194	129	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-670	SA_S1_NOR08_45m.c10397994	-	292	227	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-671	SA_S2_NOR15_50m.c10501265	+	214	279	RNA→ rpsO (PRK05626)→
env-672	CEUH01124891.1	+	289	346	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-673	CESI01168467.1	-	345	287	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-674	CESU01168001.1	-	537	479	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-675	CESM01131397.1	-	185	127	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-676	CESZ01043879.1	-	5070	5012	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-677	CENG01063226.1	-	2602	2544	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-678	CESA01043993.1	+	34	92	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-679	CEQX01317913.1	-	490	432	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)→
env-680	CESQ01364581.1	+	618	676	RNA→ hypo→
env-681	CETE01036010.1	-	845	787	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-682	CETK01367368.1	+	610	668	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-683	CETQ01203907.1	+	444	502	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-684	CEUH01124635.1	-	299	241	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-685	CEUW01071784.1	-	737	679	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-686	CEWH01138841.1	-	766	708	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-687	CEUK01251936.1	+	511	569	RNA→
env-688	CEUU01042451.1	-	497	439	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-689	CEVF01030331.1	-	845	787	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-690	CEWJ01102386.1	+	420	478	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-691	JGI24820J26691_1081338	-	226	168	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-692	JCVL_SCAF_1096627810395	+	221	279	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-693	CESM01131398.1	+	31	89	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-694	CERI01037614.1	+	3582	3642	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-695	CESF01030271.1	-	5728	5668	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-696	CESO01050962.1	-	2098	2038	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→

env-697	CETY01400875.1	-	635	575	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → PRK11824 (PRK11824)RNase_PH (pfam01138) →
env-698	CEVX01285939.1	+	370	430	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-699	CEOP01004610.1	+	2645	2705	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) →
env-700	JCVL_SCAF_1096626851857	-	1063	1003	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824) →
env-701	CENT01185471.1	-	1093	1032	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824) →
env-702	LPaug09P1610m.c1022285	-	558	498	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824) →
env-703	CENG01117863.1	+	933	989	RNA →
env-704	CENJ01221902.1	-	62	6	RNA → ←-hypo
env-705	NCBI_BBAY_READ_1105609640893	-	179	122	RNA →
env-706	CEOK01189823.1	-	83	26	RNA →
env-707	JCVL_SCAF_1101668161477	-	498	441	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-708	JGI20157J14317_10026495	-	1195	1138	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824) →
env-709	HBC_scaff_10024157	+	21661	21709	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-710	HBC_ctgs_1000293	-	1761	1713	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-711	JGI24023J19991_10000252	-	22396	22343	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) →
env-712	CERI01113722.1	-	1102	1043	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824) →
Fba-2-1	NZ_ABVV01000001.1	-	275587	275526	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → hypo → Pnp (COG1185)PRK11824 (PRK11824) → Pnp (COG1185)PRK11824 (PRK11824) → RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106) → RpoD (COG0568)sigma70-ECF (TIGR02937) → PRK05581 (PRK05581)RPE (cd00429) → PRK05581 (PRK05581)RPE (cd00429) →
env-713	DelMOSum2010.c10000077	-	70521	70460	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) → RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106) → PRK05581 (PRK05581)RPE (cd00429) →
env-714	SI34jun09_10m_1001264	-	3237	3176	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) → RpoD (COG0568)sigma70-ECF (TIGR02937) →
env-715	JGI20152J14361_10000391	-	11554	11493	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) → RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106) → PRK05581 (PRK05581)RPE (cd00429) →
env-716	JGI20160J14292_10000039	+	19294	19355	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) → RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106) → PRK05581 (PRK05581)RPE (cd00429) →
env-717	JGI20157J14317_10000232	+	16872	16933	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) → RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106) → PRK05581 (PRK05581)RPE (cd00429) →
env-718	DelMOSum2011.c10015687	-	2741	2680	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) → PRK09210 (PRK09210)Sigma70_r1_2 (pfam00140) →
env-719	JGI20151J14362_10000070	-	48313	48252	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) → RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106) → PRK05581 (PRK05581)RPE (cd00429) →
env-720	JGI20156J14371_10000130	+	17278	17339	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) → RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106) → PRK05581 (PRK05581)RPE (cd00429) →
env-721	JGI20154J14316_10000543	-	13329	13268	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) → RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106) → PRK05581 (PRK05581)RPE (cd00429) →
env-722	JGI20153J14295_10000212	-	48142	48081	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) → RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106) → PRK05581 (PRK05581)RPE (cd00429) →
env-723	JGI20153J14318_10000212	-	48142	48081	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) → RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106) → PRK05581 (PRK05581)RPE (cd00429) →
env-724	JGI20159J14440_10000191	-	27139	27078	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) → Pnp (COG1185)PRK11824 (PRK11824) → RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106) → PRK05581 (PRK05581)RPE (cd00429) →

env-725	JGI20155J14468.10000002	-	197670	197609	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→
env-726	JGI20158J14315.10001443	-	14132	14071	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→
env-727	SI60aug11.100m.c1210894	-	111	50	RNA→
env-728	SI48aug10.10m.c1076796	-	113	52	RNA→
env-729	SI48aug10.100m.1053294	-	541	480	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-730	JGI20152J14361.10285356	+	41	101	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-731	JGI20151J14362.10001694	+	13999	14059	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-732	JGI20156J14371.10036665	+	758	818	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-733	JGI20159J14440.10045471	+	1257	1317	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-734	JGI20160J14292.10275000	+	128	188	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-735	JGI20155J14468.10035248	+	2056	2116	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-736	JGI20158J14315.10222416	+	279	339	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-737	CENJ01283541.1	+	787	847	RNA→
env-738	JCVL_SCAF_1096626899896	+	1250	1310	RNA→
env-739	CENG01040397.1	-	73	13	RNA→
env-740	CESI01023085.1	-	644	584	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-741	CETK01101931.1	-	10939	10891	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-742	CEVG01048401.1	-	452	404	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-743	CESS01088671.1	+	460	508	RNA→ rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-744	CENP01025453.1	+	853	901	RNA→
env-745	CENU01400115.1	+	500	548	RNA→ rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-746	JCVL_SCAF_1096627284330	-	131	83	RNA→
env-747	CENN01195248.1	+	427	475	RNA→ rpsO (PRK05626)RpsO (COG0184)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→
env-748	CEWA01144527.1	+	171	219	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-749	CEUH01264893.1	-	295	247	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-750	CEWG01086055.1	+	2874	2922	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-751	JCVL_SCAF_1101668541356	-	246	198	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-752	CEUB01094603.1	+	343	391	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-753	CENG01122428.1	-	281	233	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-754	CENJ01278422.1	+	82	130	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-755	CEWH01115234.1	-	417	368	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-756	CESF01312487.1	+	10933	10981	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-757	CESO01048748.1	+	2685	2733	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-758	CEVG01111268.1	-	830	782	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-759	CENG01071379.1	+	1616	1664	RNA→ rpsO (PRK05626)RpsO (COG0184)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→
env-760	CENT01073065.1	+	574	622	RNA→ rpsO (PRK05626)RpsO (COG0184)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-761	CEQP01301392.1	+	997	1051	RNA→ hypo→
env-762	CETB01210491.1	+	254	308	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-763	CESM01391969.1	-	199	145	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-764	CEWG01210985.1	-	2290	2236	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-765	JCVL_SCAF_1096626961789	-	286	232	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-766	CEUF01056559.1	+	193	247	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-767	CEOV01002341.1	-	270	216	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-768	CEOW01267461.1	+	1775	1829	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-769	CEPA01173849.1	+	414	468	RNA→ hypo→
env-770	CEPT01173609.1	+	76	130	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-771	CEVG01159809.1	-	1097	1043	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-772	CEWA01198601.1	-	261	207	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-773	CETK01338805.1	+	612	666	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-774	CEUH01280879.1	+	105	159	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-775	CEVH01186256.1	+	1905	1959	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-776	CEWH01028013.1	+	91	145	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-777	CENJ01092577.1	-	1007	952	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-778	CEOK01031026.1	+	658	713	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-779	CEVU01050680.1	-	328	273	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-780	CEVP01013039.1	+	315	369	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-781	CEQN01285656.1	+	461	515	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-782	CEQY01281147.1	-	162	108	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-783	CESB01256322.1	-	418	364	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-784	CENX01069896.1	-	443	388	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-785	CEOM01046697.1	-	328	273	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-786	CENP01062878.1	+	5461	5515	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-787	CEOF01162626.1	+	613	667	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-788	CEOK01252908.1	+	73	127	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-789	SR_TTP_S3_1008655	-	875	808	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-790	SR_TP_S13sol_1003857	+	417	484	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-791	NCBL_READ_1112684383788	-	614	547	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-792	CEST01074805.1	-	430	363	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-793	CESU01086043.1	-	552	485	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-794	NCBL_READ_1112777362025	+	472	539	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-795	CESE01059308.1	-	72	5	RNA→
env-796	NCBL_READ_1112684267655	-	819	752	RNA→ hypo→
env-797	NCBL_READ_1112777442403	-	338	271	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-798	CESJ01108224.1	-	304	237	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-799	DelMOSum2010.c10152077	+	650	699	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cca-4-1	NZ_CDOL01000024.1	-	3056	3001	RNA→ rpsO (PRK05626)RpsO (COG0184)→
Cca-4-2	NZ_CDOI01000148.1	-	32622	32567	RNA→ rpsO (PRK05626)RpsO (COG0184)→
Cca-4-3	NZ_CDOH01000002.1	+	17823	17878	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-800	JGI11876J14442_10315541	-	187	137	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-801	JCVL_SCAF_1101668147026	+	1128	1191	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-802	JCVL_SCAF_1101668641004	-	585	522	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-803	KVRMV2_100003289	+	329	382	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-804	KVRMV2_100403512	+	971	1024	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-805	CERW01009190.1	-	617	563	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-806	CERK01116695.1	+	478	532	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-807	NCBLBBAY_READ_1106105340888	+	777	830	RNA→
env-808	CEVG01118472.1	-	579	526	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-809	CESM01310257.1	-	73	20	RNA→
Zga-1-1	NC_015844.1	+	930103	930167	RNA→ rpsO (PRK05626)RpsO (COG0184)→
env-810	JGI26524J50256_1000051	+	47029	47095	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-811	JGI26523J50269_1000086	-	81858	81792	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-812	JGI26534J51046_1001036	+	19681	19747	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-813	JGI25911J50253_10156824	-	177	112	RNA→
env-814	JGI25910J50241_10411963	+	60	125	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-815	JGI25912J50252_10064814	-	743	678	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-816	JGI25908J49247_10047059	-	348	283	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-817	JGI25914J50564_10007880	+	233	298	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-818	JGI25920J50251_10000314	-	11641	11576	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-819	JGI25920J50251_10070705	-	70	5	RNA→	
env-820	JGI25914J50564_10014061	-	82	17	RNA→	
env-821	JCVL_SCAF_1101668133290	+	581	646	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-822	JGI25920J50251_10005537	+	3465	3530	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-823	JGI12421J11937_10023408	+	486	551	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-824	CEWG01134755.1	-	547	492	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-825	DelMOSum2011.c10066067	+	20	85	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)PNPase (pfam03726)RNase_PH (pfam01138)→
env-826	CESJ01016598.1	+	4458	4522	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-827	CESI01019537.1	-	314	249	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-828	JCVL_SCAF_1096627403573	-	332	267	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-829	PML_READ_01087893	-	217	151	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-830	PML_READ_00236953	+	109	174	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-831	PML_READ_01045449	-	100	35	RNA→	
env-832	CESU01015641.1	-	388	323	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-833	LPaug08P2610m.c1025036	-	264	199	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-834	LPjun09P1210m.c1044378	-	232	167	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-835	DelMOSum2010.c10056809	-	1201	1136	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-836	SI60aug11_200m.c1181697	+	116	180	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-837	SI36aug09_120m.1049180	+	473	537	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-838	SI47jul10_100m.c1026668	-	558	494	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-839	SI60aug11_100m.c1000082	+	8859	8923	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-840	SI48aug10_10m.c1011319	+	396	460	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-841	SI34jun09_10m.1000012	+	25879	25943	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-842	SI34jun09_120m.1001580	-	5416	5352	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-843	SI34jun09_135m.1005514	+	3165	3229	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-844	SI36aug09_100m.1014540	-	871	807	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-845	SI34jun09_100m.1000069	-	38756	38692	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-846	SI48aug10_100m.1002881	-	383	319	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-847	DelMOSum2011.c10015265	-	605	540	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-848	JGI20157J14317_10011885	-	386	321	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-849	DelMOSum2010.c10060176	-	479	414	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-850	SI34jun09_100m.1160428	+	29	94	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-851	JGI20156J14371_10000759	+	27598	27663	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-852	JGI20157J14317_10012691	-	388	323	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-853	JGI20155J14468_10000146	-	524	459	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-854	CESO01040974.1	+	1915	1980	RNA→	
env-855	CEWO01311710.1	+	677	742	RNA→	
env-856	2236876009_219883	-	133	67	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-857	SI39nov09_10m.c1013699	+	177	242	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-858	SI48aug10_10m.c1001560	-	392	327	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-859	SI48aug10_100m_1003033	+	2938	3003	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-860	JGI20152J14361_10014083	-	305	240	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-861	JGI20160J14292_10040223	+	2051	2116	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-862	JGI20159J14440_10514398	-	304	239	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-863	CESF01137326.1	+	1896	1961	RNA→	
env-864	CETY01149387.1	-	339	274	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-865	SI54feb11_100m_c1083680	-	282	217	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-866	JGI20156J14371_10129797	-	113	48	RNA→	
env-867	JGI20155J14468_10151635	+	628	693	RNA→	
env-868	JGI20160J14292_10059861	-	181	116	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-869	JCVL_SCAF_1101668107239	+	814	879	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-870	JGI20154J14316_10048683	-	1152	1087	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-871	JGI20153J14295_10057124	-	943	878	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-872	JGI20153J14318_10057124	-	943	878	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-873	JGI20159J14440_10010099	+	2098	2163	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ sigma70-ECF (TIGR02937)Sigma70_r1_2 (pfam00140)Sigma70_r2 (pfam04542)→
env-874	JGI20158J14315_10004959	-	6347	6282	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→ S1 (smart00316)KH (smart00322)Pnp (COG1185)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-875	CEOP01365269.1	-	98	33	RNA→	
env-876	DelMOWin2010_c10528752	+	190	255	RNA→	rpsO (PRK05626)→
env-877	JGI20156J14371_10036705	+	2103	2168	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-878	JGI20160J14292_10049262	-	1686	1621	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-879	JGI20157J14317_10057593	-	704	639	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-880	JGI20155J14468_10064733	-	1016	951	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-881	JGI20152J14361_10000414	-	3697	3632	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→
env-882	JGI20151J14362_10002476	+	4075	4140	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)bSCRAP40 (bSCRAP40)bSCRAP106 (bSCRAP106)→ PRK05581 (PRK05581)RPE (cd00429)→ anmK (PRK09585)AnmK (pfam03702)→
env-883	2236876001_196002	-	290	236	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-884	JGI20155J14468_10058899	+	1110	1164	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-885	JGI20158J14315_10054641	-	1345	1291	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)PNPase (pfam03726)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-886	CENT01010038.1	+	1338	1392	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-887	CESF01070596.1	+	472	526	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-888	CESO01000708.1	-	1675	1621	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-889	CEVU01160017.1	+	113	167	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-890	CEWO01095888.1	-	470	416	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-891	JCVL_SCAF_1096627428780	-	347	293	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-892	JCVL_SCAF_1096627340448	-	710	656	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-893	CEWG01034068.1	-	8107	8053	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→ AnmK (COG2377)anmK (PRK09585)→
env-894	DelMOWin2010_c10023670	+	1770	1824	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)PNPase (pfam03726)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-895	CENF01414486.1	+	550	604	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)PNPase (pfam03726)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-896	CEOP01028619.1	-	1417	1363	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→

env-897	CESM01030051.1	-	2678	2624	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-898	CETY01071453.1	-	87	33	RNA→	
env-899	CEVX01269025.1	-	90	36	RNA→	
env-900	JCVL_SCAF_1096627909011	+	651	705	RNA→	PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-901	LPaug09P1610m_c1031693	-	129	73	RNA→	rpsO (PRK05626)→
env-902	LPjun09P1210m_c1013475	-	432	376	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-903	DelMOSum2010.c10000068	+	18253	18310	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-904	A09P0410a_Sequence0000021066	-	462	405	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-905	JGI20157J14317_10344599	-	183	126	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-906	JGI25920J50251_10011692	-	2092	2026	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-907	JGI25911J50253_10208029	-	174	108	RNA→	
env-908	JGI25910J50241_10133287	-	519	453	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
Fge-1-1	NZ_KE383905.1	-	172236	172170	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ale-2-1	NZ_KN050846.1	-	2805051	2804985	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-909	PBR_1019653	-	5944	5878	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-910	JGI24723J26617_10002167	-	11651	11585	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-911	JCVL_SCAF_1101668691680	+	126	192	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-912	CEWG01179869.1	+	230	296	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-913	CETK01031226.1	-	238	171	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-914	CESF01019749.1	-	849	782	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-915	CESO01019946.1	+	842	909	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-916	CEUH01062216.1	-	338	272	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Man-1-1	NZ_KK211215.1	-	65801	65738	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-917	JGI20156J14371_10007079	-	147	90	RNA→	rpsO (PRK05626)→
env-918	JGI20160J14292_10016935	-	147	90	RNA→	rpsO (PRK05626)→
env-919	CEVW01069772.1	-	669	612	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-920	JGI20156J14371_10415361	+	33	90	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-921	JGI20160J14292_10453555	-	300	243	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-922	JGI20155J14468_10000239	-	6353	6296	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-923	DelMOSum2010.c10011135	-	3298	3241	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-924	DelMOSum2010.c10190970	+	126	183	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_I (cd11363)PRK11824 (PRK11824)→
env-925	JGI20156J14371_10100972	+	860	917	RNA→	
env-926	JGI20160J14292_10127509	-	69	12	RNA→	
env-927	JGI20159J14440_10000775	-	3153	3096	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-928	CEUW01210784.1	+	690	747	RNA→	
env-929	CEUK01207791.1	+	22	79	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_I (cd11363)PRK11824 (PRK11824)→
env-930	CEUU01245541.1	-	1236	1179	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_I (cd11363)PRK11824 (PRK11824)→
env-931	CEVF01306501.1	-	4315	4258	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-932	CEQD01093616.1	+	62	120	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-933	Y607_1006247	+	254177	254245	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-934	3300000558_11729233	-	567	500	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-935	3300001605_10025997	-	1325	1258	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-936	AYRH01021120.1	-	183	121	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-937	CEWO01187126.1	-	947	880	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-938	CEVS01341770.1	-	695	640	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-939	CEVW01355221.1	-	618	563	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-940	CEQM01182343.1	+	515	570	RNA→	
env-941	CEQN01033481.1	-	720	665	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-942	CESQ01380936.1	-	103	48	RNA→	
env-943	CEVP01035867.1	+	331	386	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-944	CEQO01283396.1	+	1289	1344	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-945	CERS01106140.1	+	701	756	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-946	CEUA01394830.1	+	729	784	RNA→	
Tma-1-1	NZ.BAUG01000053.1	-	3972	3908	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-947	JGI25920J50251_10315894	+	94	151	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsp-12-1	NZ_AUEU01000012.1	+	243905	243971	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fde-1-1	NZ_AUDL01000013.1	-	39996	39930	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fba-7-1	NZ_AFPB01000144.1	-	4726	4662	RNA→	rpsO (PRK05626)RpsO (COG0184)→ rpsO (PRK05626)RpsO (COG0184)→
Ale-1-1	NZ_BBNQ01000031.1	-	6559	6493	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ale-1-2	NZ_BBNU01000036.1	+	8531	8597	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ffr-1-1	NZ_AUDO01000008.1	-	223593	223528	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-948	JGI25921J50272_10193124	-	177	111	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Fsp-1-1	NZ_JYGZ01000002.1	-	102653	102588	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-949	3300001592_10204136	-	110	44	RNA→	
env-950	M3P_c10003408	-	87	21	RNA→	
Fsa-2-1	NZ_JMLU01000001.1	+	65197	65263	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-951	3300001605_10665184	+	444	510	RNA→	
env-952	3300001605_10033828	+	4228	4294	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fba-3-1	NZ_AAAX01000002.1	-	363051	362985	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-953	TB_FS06_10DRAFT_1000175	-	6311	6245	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-954	3300001605_10453220	-	110	44	RNA→	
env-955	CESI01049345.1	+	1523	1589	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-956	CEST01010500.1	-	551	485	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-957	NCBI_READ_1112788336194	+	594	660	RNA→	
env-958	JCVL_SCAF_1101667195802	-	126	70	RNA→	hypo→
env-959	SRS018157_Baylor_scaffold_12805	+	66	120	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Csp-1-1	NZ_ABZV01000001.1	+	56329	56384	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-960	SRS024289_LANL_scaffold_56301	+	344	399	RNA→	rpsO (PRK05626)→
env-961	SRS051244_LANL_scaffold_25997	+	197	252	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Csp-3-1	NZ_KB291394.1	-	29522	29467	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-962	SRS021496_Baylor_scaffold_73949	-	2767	2712	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-963	SRS022530_LANL_scaffold_20874	-	38233	38178	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-964	SRS063288_LANL_scaffold_3750	-	772	717	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-965	SRS011098_Baylor_scaffold_11988	+	19624	19680	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-966	SRS023938_Baylor_scaffold_45086	+	428	483	RNA→	
env-967	SRS014573_C3519028	+	210	265	RNA→	rpsO (PRK05626)→
env-968	SRS015434_C5951484	+	1370	1425	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-969	SRS018439_Baylor_scaffold_4715	+	14608	14663	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-970	SRS022719_C2913748	-	436	381	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-971	SRS024441_LANL_scaffold_31186	+	18667	18722	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-972	SRS015470_WUGC_scaffold_17737	+	950	1005	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-973	SRS015947_WUGC_scaffold_20781	-	17604	17549	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-974	SRS016092_WUGC_scaffold_7783	-	4221	4166	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-975	SRS019591_WUGC_scaffold_41796	+	10308	10363	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-976	SRS017814_C2664019	-	331	276	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-977	SRS019029_C3201897	+	280	335	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-978	SRS019077_C2652316	+	764	819	RNA→	rpsO (PRK05626)→
env-979	SRS051378_C1874895	-	114	59	RNA→	rpsO (PRK05626)→
env-980	SRS019127_WUGC_scaffold_15951	-	88	33	RNA→	
env-981	SRS055450_LANL_scaffold_46997	+	520	575	RNA→	
env-982	SRS019387_C1738776	+	554	609	RNA→	
env-983	SRS020862_Baylor_scaffold_705	+	10311	10366	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-984	SRS024021_Baylor_scaffold_18404	+	1381	1436	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-985	SRS047100.C2096794	-	1382	1327	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-986	SRS050628.LANL_scaffold.20741	+	893	948	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-987	SRS065310.LANL_scaffold.14848	-	379	324	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-988	SRS063603.LANL_scaffold.3555	-	469	414	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-989	SRS015540.C1142881	+	29	84	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-990	SRS013879.WUGC_scaffold.44390	-	1424	1369	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-991	SRS015797.WUGC_scaffold.12357	-	4177	4122	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-992	SRS023926.Baylor_scaffold.18801	-	32149	32094	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-993	SRS014888.C3106033	-	1913	1858	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-994	SRS015440.WUGC_scaffold.28748	+	418	473	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-995	SRS015899.WUGC_scaffold.18506	+	1223	1278	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-996	SRS018145.Baylor_scaffold.48780	-	786	731	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-997	SRS019225.WUGC_scaffold.29613	+	4319	4374	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-998	SRS057692.LANL_scaffold.3535	+	4937	4992	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-999	SRS016037.WUGC_scaffold.44207	+	7031	7086	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1000	SRS016225.C2977708	+	383	438	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1001	SRS017511.C3344598	+	142	197	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1002	SRS018573.WUGC_scaffold.30691	+	507	562	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1003	SRS019073.WUGC_scaffold.15301	-	330	275	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1004	SRS019122.C5920199	+	1857	1912	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1005	SRS019333.C1243671	+	173	228	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1006	SRS020340.C2878267	+	340	395	RNA→	
env-1007	SRS021477.Baylor_scaffold.40483	+	1827	1882	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1008	SRS024561.LANL_scaffold.37452	+	268	323	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1009	SRS047265.WUGC_scaffold.19746	-	470	415	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-1010	SRS055401.LANL_scaffold.34453	+	585	640	RNA→	rpsO (PRK05626)→
env-1011	SRS053630.C928372	-	3451	3396	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1012	CEOK01091424.1	+	379	434	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1013	CENG01166087.1	+	243	298	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1014	CENJ01054220.1	+	696	751	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1015	CENX01011707.1	+	917	972	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1016	CENP01029996.1	+	133	188	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1017	CETL01077499.1	+	235	290	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1018	CESP01137952.1	+	2063	2118	RNA→	PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-1019	CENX01186301.1	-	389	334	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1020	CEOF01186277.1	-	389	334	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1021	CESW01208627.1	+	457	513	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1022	CEQX01005238.1	-	426	371	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1023	CEPU01014169.1	-	422	367	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1024	CEVH01129166.1	-	2144	2089	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-1025	CEOW01121765.1	-	962	907	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-1026	CEVX01126697.1	-	281	226	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1027	CEVS01109929.1	-	229	174	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1028	CEVH01173857.1	-	230	174	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1029	CEUW01249740.1	-	307	251	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1030	CEUM01264125.1	-	71	15	RNA→	
env-1031	CEUV01191480.1	-	71	15	RNA→	
env-1032	CEUU01248441.1	+	1447	1503	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1033	CEVF01023934.1	+	1550	1606	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1034	CETP01104982.1	+	419	475	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-1035	CEWG01181614.1	-	71	15	RNA→
env-1036	CAM_READ_0233394955	-	381	324	RNA→ ←-hypo
env-1037	CETQ01034087.1	-	365	310	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1038	JCVL_SCAF_1101668393340	+	580	636	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1039	CEOX01118814.1	+	508	564	RNA→
env-1040	CEOV01159916.1	+	492	548	RNA→
env-1041	CEOK01026918.1	-	67	10	RNA→
env-1042	CENJ01059679.1	+	390	447	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1043	CENP01107856.1	-	726	669	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1044	JCVL_SCAF_1101668367367	+	220	278	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1045	JCVL_READ_1103359209347	+	374	430	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1046	CENJ01271348.1	+	690	746	RNA→
env-1047	CERR01108442.1	-	2061	2005	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-1048	CEVW01297929.1	-	67	11	RNA→
env-1049	CERK01007231.1	+	11630	11686	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-1050	CERW01018950.1	+	11301	11357	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-1051	CERV01210325.1	+	688	744	RNA→
env-1052	CEWB01130717.1	+	504	560	RNA→
env-1053	CEVX01029906.1	-	1046	990	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1054	CEWO01080375.1	+	31704	31760	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-1055	CERG01075223.1	-	301	245	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1056	JCVL_SCAF_1101668453793	-	755	699	RNA→ rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1057	CETE01088223.1	-	254	198	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1058	CEVG01324060.1	+	1087	1143	RNA→
env-1059	CEQX01186058.1	-	92	36	RNA→
env-1060	CETL01280057.1	+	711	767	RNA→
env-1061	CEOP01144955.1	-	414	358	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1062	CEOM01088735.1	-	235	179	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1063	CEOK01164348.1	+	1258	1314	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH.C (pfam03725)→
env-1064	CEOO01015551.1	+	104	160	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1065	CEPW01148047.1	-	367	311	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1066	CESQ01107160.1	+	179	235	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1067	CEVP01076511.1	+	372	428	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1068	CEWO01041439.1	+	478	534	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1069	JCVL_SCAF_1101668473583	-	731	675	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1070	CENF01040883.1	+	158	214	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1071	CERK01009463.1	-	541	485	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-1072	CERR01043387.1	+	2545	2601	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1073	CERV01074256.1	-	390	334	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1074	CETI01126305.1	-	941	885	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1075	CEUB01187863.1	+	575	631	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-1076	CEVX01089166.1	+	423	479	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1077	CEOM01102445.1	-	218	162	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1078	CEOP01072639.1	-	187	131	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1079	CESM01057045.1	-	387	331	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1080	CETE01063798.1	+	198	254	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1081	CEVX01052949.1	+	126	182	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1082	JCVL_SCAF_1096627072953	+	895	951	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1083	CENT01157003.1	-	481	425	RNA→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→

env-1084	CEVU01001438.1	-	529	473	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-1085	JCVI_READ_1103180834378	-	500	444	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-1086	JCVI_READ_1108830074671	-	624	568	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1087	CEWG01092952.1	-	74	18	RNA→	
env-1088	CESW01098570.1	-	598	542	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1089	CENG01044642.1	-	530	474	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-1090	CEOM01078862.1	+	107	163	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-1091	CEOY01062467.1	+	215	271	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1092	CEPU01224898.1	-	334	278	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1093	CESN01053220.1	-	69	13	RNA→	
env-1094	CETI01258919.1	+	443	499	RNA→	
env-1095	CEVZ01325749.1	+	257	313	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1096	CAM_READ_0233245559	+	268	324	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1097	JCVI_READ_1108830074672	-	627	571	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1098	JCVI_SCAF_1096626319309	+	109	165	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1099	85126184	+	606	662	RNA→	
env-1100	JCVI_READ_1103180276409	+	606	662	RNA→	
env-1101	CENP01224387.1	-	579	523	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1102	CEOO01058349.1	+	262	318	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1103	CEPL01104959.1	+	227	283	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1104	CEQN01113421.1	-	266	210	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1105	CESZ01006198.1	+	105	161	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1106	CEVX01162813.1	+	10219	10275	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-1107	CAM_READ_0234149989	-	230	174	RNA→	
env-1108	JCVI_READ_1108830083326	-	137	81	RNA→	rpsO (PRK05626)→
env-1109	JCVI_READ_1108799804924	+	237	293	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1110	CEWB01036815.1	-	340	283	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1111	JCVI_SCAF_1096628021305	-	1523	1467	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1112	CESN01190334.1	+	896	952	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-1113	CETE01015087.1	-	366	310	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1114	CETK01092484.1	+	149	205	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1115	CETJ01158801.1	-	614	558	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1116	CETO01171402.1	-	663	607	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1117	CEUJ01011635.1	-	1182	1126	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-1118	CEUL01314205.1	-	583	527	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1119	CEUQ01085079.1	+	281	337	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1120	JGI24820J26691_1000397	+	11685	11741	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-1121	CETT01075724.1	-	760	704	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1122	CENX01010795.1	+	29698	29754	RNA→	rpsO (PRK05626)RpsO (COG0184)→ Pnp (COG1185)PRK11824 (PRK11824)→ RpoD (COG0568)sigma70-ECF (TIGR02937)→ PRK05581 (PRK05581)RPE (cd00429)→
env-1123	CEPT01054511.1	+	99	155	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1124	CESW01141929.1	-	852	796	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1125	CETG01325760.1	-	690	634	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1126	CETM01138654.1	+	38	94	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1127	CETS01042552.1	+	1863	1919	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1128	CEOF01214230.1	-	326	270	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1129	JGI25921J50272_10110947	-	112	45	RNA→	hypo→
env-1130	JGI25921J50272_10064100	+	59	126	RNA→	rpsO (PRK05626)Ribosomal_S15p_S13e (cd00353)→
env-1131	JGI12547J11936_1016467	-	880	813	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1132	JGI25912J50252_10000040	+	10957	11024	RNA→	rpsO (PRK05626)RpsO (COG0184)→

env-1133	JGI25925J51416_10000721	-	2637	2570	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1134	JGI12421J11937_10092536	-	740	673	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1135	JGI25910J50241_10000033	+	10957	11024	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1136	JGI25911J50253_10000079	-	16190	16123	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1137	JGI25914J50564_10211613	-	350	283	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1138	M3P_c10368127	-	78	11	RNA→	
env-1139	JGI25921J50272_10001427	-	6248	6181	RNA→	rpsO (PRK05626)RpsO (COG0184)→ Pnp (COG1185)PRK11824 (PRK11824)→
env-1140	JGI25913J50563_1000060	-	14177	14110	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1141	CEOK01126743.1	+	2956	3010	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1142	CENJ01063439.1	-	3516	3462	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1143	CENP01230084.1	+	4337	4391	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Lsp-4-1	NZ_JPOL0100002.1	-	3091910	3091846	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cca-5-1	NZ_AUFK01000009.1	-	843585	843537	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1144	SwRhRL2b_contig_307599	-	287	239	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Fan-1-1	NZ_ATT01000001.1	-	367999	367938	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fte-1-1	NZ_AUDN01000008.1	+	180924	180985	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1145	JGI24723J26617_10000025	-	95199	95137	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1146	JGI1221J11331_1065710	+	185	247	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1147	CEOS01027552.1	+	66892	66954	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1148	CEOX01194702.1	-	519	457	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1149	CESL01150597.1	-	869	807	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1150	CETA01146872.1	-	546	484	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1151	CETB01171796.1	+	30062	30124	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1152	CETR01014521.1	+	66892	66954	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1153	CETS01016621.1	+	66892	66954	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1154	CETT01201410.1	+	158	220	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1155	CEVJ01093656.1	-	1367	1305	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1156	CEVK01102272.1	-	1022	960	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1157	CEVQ01351872.1	+	781	843	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1158	CEWI01263175.1	+	378	316	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1159	CERQ01119226.1	-	71	9	RNA→	
env-1160	CEVI01194451.1	-	71	9	RNA→	
env-1161	CETG01242168.1	+	199	261	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1162	JGI24025J20009_10171038	+	263	325	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1163	JGI20152J14361_10000034	-	29790	29725	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1164	JGI20156J14371_10001636	-	2827	2762	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1165	JGI20153J14295_10056361	-	492	427	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1166	JGI20153J14318_10056361	-	492	427	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1167	DelMOSum2011.c10000619	+	21340	21404	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1168	2236876010_0099679	-	354	287	RNA→	
env-1169	2236876001_018781	-	282	215	RNA→	hypo→
Psp-6-1	NZ_CBRF010000389.1	-	277	212	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1170	CESU01016827.1	-	658	593	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1171	CESI01053671.1	-	1054	989	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1172	NCBI_READ_1112493756060	+	800	866	RNA→	
env-1173	NCBI_READ_1112290405280	-	757	690	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1174	2236876010_0188177	+	202	268	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Tov-1-1	NZ_AUMF01000013.1	+	158381	158445	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Pir-1-1	NZ_CH724148.1	+	565143	565208	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1175	NCBI_READ_1112290390846	+	257	324	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1176	NCBI_READ_1112788434094	+	709	776	RNA→	
env-1177	NCBI_READ_1112777244532	-	379	312	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-1178	NCBI_READ.1112637244083	+	363	430	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1179	NCBI_READ.1112637711645	+	430	497	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1180	CESE01018107.1	+	12288	12355	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1181	CEST01011319.1	+	1239	1306	RNA→	
env-1182	NCBI_READ.1112788335987	-	294	227	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1183	wf3_AHA15724.y1	-	298	233	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1184	DelMOWin2010.c10256912	+	1	66	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1185	SI60aug11.100m.c1001628	-	875	810	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1186	JGI20152J14361.10009221	-	790	725	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Psp-1-1	NZ_JPDI01000001.1	-	301145	301080	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1187	JGI20160J14292.10015031	+	1484	1549	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1188	JGI20153J14295.10072278	-	131	66	RNA→	
env-1189	JGI20153J14318.10072278	-	131	66	RNA→	
env-1190	2236876009.034639	-	316	251	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1191	SI60aug11.200m.c1030663	-	361	296	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1192	SI34jun09.10m.1045700	+	218	283	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1193	JGI20154J14316.10009990	+	1427	1492	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1194	JGI20153J14295.10000097	-	96	31	RNA→	
env-1195	JGI20153J14318.10000097	-	96	31	RNA→	
env-1196	DelMOSum2010.c10004701	+	2457	2522	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1197	NCBI_READ.1112532466838	+	411	476	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1198	JGI20154J14316.10069178	+	223	288	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1199	CEWR01072923.1	+	9501	9566	RNA→	
env-1200	NCBI_READ.1112494129442	-	686	621	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1201	NCBI_READ.1112493965127	-	731	666	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1202	CEST01080561.1	-	520	455	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1203	CESI01299916.1	-	89	24	RNA→	
env-1204	NCBI_READ.1112493618954	-	348	283	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1205	P_2C_Liq_3.UnCty_100110	-	10558	10493	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1206	P_2C_Liq_1.UnCty_1000155	+	17803	17868	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1207	P_2C_Liq_2.UnCty_10014517	-	424	359	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Psp-3-1	NZ_JHZZ01000001.1	+	843905	843970	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→ Pnp (COG1185)PRK11824 (PRK11824)→
env-1208	DelMOSum2011.c10451001	-	187	122	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1209	JGI20156J14371.10087495	+	211	276	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1210	JGI20159J14440.10134887	-	66	1	RNA→	
env-1211	JGI20152J14361.10000060	+	50242	50307	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1212	P_2C_Liq_1.UnCty_1001158	-	2910	2845	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1213	JGI20153J14295.10391622	-	175	109	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1214	JGI20153J14318.10391622	-	175	109	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Psp-2-1	NZ_JPDS01000003.1	+	146619	146684	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Psp-4-1	NC.020830.1	-	2479424	2479359	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1215	2236876010.0335376	+	192	256	RNA→	hypo→
env-1216	JCVL_SCAF_1096627466044	+	161	226	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1217	2236876010.0251574	-	232	167	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1218	2236876010.0458838	-	157	92	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1219	2236876010.0341471	-	321	256	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1220	DelMOSum2011.c10002449	-	3023	2958	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1221	CER101273154.1	-	366	301	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1222	SI34jun09.10m.1064123	+	231	296	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1223	JGI20151J14362.10003118	+	10963	11028	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1224	JGI20159J14440.10001807	-	6646	6581	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1225	JGI20158J14315.10040249	-	1575	1510	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-1226	JGI20154J14316_10029064	-	823	758	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1227	JGI20153J14295_10003610	-	825	760	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1228	JGI20153J14318_10003610	-	825	760	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1229	JGI20155J14468_10055793	-	1584	1519	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1230	2236876010.0648566	+	166	232	RNA→	rpsO (PRK05626)→
env-1231	2236876010.0594514	+	218	283	RNA→	
env-1232	2236876009_222657	-	142	77	RNA→	rpsO (PRK05626)→
env-1233	2236876010.0518603	-	123	58	RNA→	hypo→
env-1234	2236876010.0164712	+	288	353	RNA→	
env-1235	2236876010.0454774	+	51	116	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1236	DelMOWin2010_c10635086	+	50	115	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1237	JGI20152J14361_10030741	-	526	461	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1238	JGI20156J14371_10002279	-	527	462	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1239	JGI20160J14292_10001237	-	71	6	RNA→	
env-1240	JGI20157J14317_10001850	+	18454	18519	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1241	2236876010.0276371	+	118	182	RNA→	
env-1242	JGI20154J14316_10081544	-	110	45	RNA→	hypo→
env-1243	JGI20153J14295_10059635	-	113	48	RNA→	hypo→
env-1244	JGI20153J14318_10059635	-	113	48	RNA→	hypo→
env-1245	PML_READ_00810429	+	39	104	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1246	PML_READ_00749665	+	164	229	RNA→	hypo→
env-1247	JGI20156J14371_10251340	-	138	74	RNA→	
env-1248	JGI20152J14361_10042742	+	1189	1254	RNA→	hypo→
env-1249	JGI20160J14292_10013292	+	5005	5070	RNA→	
env-1250	JGI20153J14295_10037233	-	1940	1875	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1251	JGI20153J14318_10037233	-	1940	1875	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1252	CESU01096896.1	-	500	435	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1253	PML_READ_00817042	+	104	169	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1254	DelMOSum2010_c10498216	+	248	313	RNA→	
env-1255	SI34jun09_100m_1156551	+	262	327	RNA→	
env-1256	JGI20154J14316_10022051	+	3363	3428	RNA→	hypo→
env-1257	JGI20153J14295_10059402	-	113	48	RNA→	hypo→
env-1258	JGI20153J14318_10059402	-	113	48	RNA→	hypo→
env-1259	JGI20152J14361_10005596	+	1194	1259	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1260	JGI20156J14371_10001740	+	17326	17391	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-1261	JGI20157J14317_10050291	-	461	396	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-1262	JGI20160J14292_10037220	-	1297	1232	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1263	JGI20151J14362_10001103	-	1600	1535	RNA→	rpsO (PRK05626)RpsO (COG0184)→ hypo→ Pnp (COG1185)PRK11824 (PRK11824)→
env-1264	SI34jun09_10m_1001615	-	5506	5441	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→ Pnp (COG1185)PRK11824 (PRK11824)→
env-1265	SI34jun09_10m_1017464	+	625	690	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1266	SI34jun09_135m_1013108	-	2236	2171	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1267	SI34jun09_100m_1007927	+	444	509	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1268	SI48aug10_100m_1159875	+	93	158	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1269	JGI20154J14316_10014588	-	110	45	RNA→	hypo→
env-1270	CESF01290968.1	-	205	140	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1271	JCVL_SCAF_1096627401693	-	1341	1276	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1272	SI48aug10_10m_c1023266	+	218	283	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1273	SI34jun09_120m_1022537	+	54	119	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1274	JGI20156J14371_10172854	+	486	551	RNA→	
env-1275	JGI20153J14295_10026978	-	113	48	RNA→	hypo→
env-1276	JGI20153J14318_10026978	-	113	48	RNA→	hypo→
env-1277	2236876009_230751	-	266	201	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-1278	CESE01261489.1	+	340	405	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1279	CEST01084614.1	-	1635	1570	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ccy-1-1	NZ_CDOF01000013.1	-	34423	34369	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ccy-1-2	NZ_CDOG01000011.1	-	34424	34370	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ccy-2-1	NZ_KB900704.1	-	181426	181372	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ccy-1-3	NZ_CDOD01000067.1	+	17098	17152	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Tme-1-1	NZ_LDOD01000002.1	+	281523	281586	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Tsp-1-1	NZ_JADN01000008.1	-	275749	275686	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1280	JGI20154J14316_10212002	+	357	424	RNA→	
env-1281	DelMOSum2011.c10031224	+	1515	1582	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1282	NCBI_READ_1112493817117	+	489	556	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1283	NCBI_READ_1112532339470	-	139	72	RNA→	
env-1284	JGI20154J14316_10007880	+	7231	7298	RNA→	
env-1285	JGI20153J14295_10044777	-	1598	1531	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1286	JGI20153J14318_10044777	-	1598	1531	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1287	NCBI_READ_1112493996523	-	766	699	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1288	NCBI_READ_1112493957189	-	592	525	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1289	NCBI_READ_1112494170669	-	517	450	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1290	CESE01136377.1	+	326	393	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1291	CEST01080931.1	+	326	393	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1292	CEWR01087712.1	+	3318	3385	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1293	NCBI_READ_1112493907442	+	499	566	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1294	NCBI_READ_1112494181464	+	794	861	RNA→	
env-1295	DelMOSum2010.c10001171	+	1998	2065	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1296	JGI20154J14316_10023581	-	1717	1650	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1297	JGI20160J14292_10181928	-	501	434	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1298	JGI20157J14317_10011652	+	375	442	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1299	NCBI_READ_1112493510178	+	737	804	RNA→	
env-1300	DelMOWin2010.c10091431	-	949	884	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1301	2236876010.0513203	+	165	230	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1302	2236876010.0390247	+	46	111	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1303	2236876010.0377328	+	221	286	RNA→	←-hypo
env-1304	CEPZ01057464.1	+	94811	94876	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1305	SA_S2_NOR15_50m.c10278819	+	84	148	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1306	SA_S1_NOR08_45m.c10000468	+	15998	16062	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1307	SA_S1_NOR05_45m.c10094816	+	548	612	RNA→	rpsO (PRK05626)→
env-1308	SA_S1_NOR08_45m.c10341122	-	105	42	RNA→	
env-1309	SA_S1_NOR08_45m.c10492149	+	268	332	RNA→	
env-1310	KGLS1_ANT02_95m.c10084079	-	684	620	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1311	KGLS2_ANT04_2345m.c1062656	+	34	98	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Tna-1-1	NZ_JTDV01000003.1	-	177687	177624	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1312	NCBI_READ_1112308404053	-	82	19	RNA→	
Cly-1-1	NZ_CP009239.1	+	671680	671743	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cge-1-1	NZ_ARZX01000025.1	-	10591	10528	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cly-2-1	NC_015167.1	+	719362	719425	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Sxi-1-1	NZ_KE384055.1	-	51323	51260	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ste-1-1	NZ_KE384221.1	-	180772	180709	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cal-1-1	NC_014934.1	-	2557672	2557605	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1313	G312J29652_10037410	+	360	426	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Mze-2-1	NZ_AFOE01000038.1	-	92933	92869	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1314	BS_KBB_SWE26_205m.c1009634	+	1084	1151	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1315	BS_KBA_SWE21_205m_10014103	+	1629	1696	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-1316	BS_KBA_SWE12_21m.c10159732	+	214	281	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1317	JGI24770J26754_10000514	+	13589	13655	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1318	JGI24770J26754_10369233	+	63	130	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Fgi-1-1	NZ_JNCP01000044.1	-	44328	44263	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsu-2-1	NZ_JATV01000015.1	+	31818	31885	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1319	JGI24770J26754_10511844	-	322	256	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1320	BS_KBB_SWE26_205m.c1206028	+	132	198	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1321	BS_KBA_SWE12_21m.c10074375	-	497	431	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1322	BS_KBA_SWE21_205m.10062507	-	450	384	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fjo-1-1	NC_009441.1	-	1659768	1659702	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsp-7-1	NZ_AKZQ01000027.1	-	119685	119618	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsp-13-1	NZ_AMYW01000001.1	-	340269	340204	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsp-6-1	NZ_AKJZ01000010.1	-	81893	81828	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsp-8-1	NZ_JSyo01000054.1	+	12825	12890	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsp-10-1	NZ_Jsyp01000001.1	+	564883	564948	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fhy-1-1	NZ_JPRM01000021.1	+	90628	90693	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1323	ARWTCa.c258734	+	36	101	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1324	PBR_1164806	-	6336	6271	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsp-11-1	NZ_JXQR01000045.1	-	39476	39411	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fch-1-1	NZ_JASY01000002.1	-	513988	513923	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1325	BS_KBA_SWE21_205m.10269192	-	314	250	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1326	BS_KBA_SWE21_205m.10250829	+	230	294	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1327	BS_KBA_SWE02_21m.10049645	-	190	126	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1328	BS_KBA_SWE12_21m.c10022633	+	520	584	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1329	BS_KBB_SWE26_205m.c1001111	-	783	719	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1330	JGI25914J50564_10000261	-	10238	10176	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1331	JGI25917J50250_10000514	+	5135	5197	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1332	TB_FS06_10DRAFT_1000014	-	38913	38850	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1333	TB_GS09_5_10013944	+	2931	2994	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Gsp-4-1	NZ_JQLP01000005.1	-	753960	753897	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Gli-1-1	NZ_JH594606.1	+	1080060	1080123	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1334	ACOFG987_F36MELC02HNE7Q	-	136	72	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1335	3300001197_1006016	-	258	195	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1336	KGLS1_ANT02_95m.c10124631	+	34	97	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1337	KGLS1_ANT02_95m.c10029222	+	1799	1862	RNA→	
env-1338	KGLS1_ANT01_95m.c10051775	-	89	26	RNA→	
env-1339	KGLS1_ANT01_95m.c10120864	+	17	80	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1340	KGLS2_ANT04_2345m.c1012199	+	2487	2550	RNA→	←-hypo
env-1341	KGLS1_ANT02_95m.c10492692	-	191	128	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Gsp-5-1	NZ_KE384218.1	-	925343	925280	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1342	KGLS1_ANT01_95m.c10008468	-	78	15	RNA→	←-hypo
env-1343	KGLS1_ANT01_95m.c10008586	-	85	22	RNA→	
env-1344	KGLS1_ANT01_95m.c10068748	-	92	29	RNA→	
env-1345	KGLS2_ANT04_2345m.c1047821	+	810	873	RNA→	
env-1346	KGLS2_ANT04_2345m.c1020564	-	89	26	RNA→	
Gsp-3-1	NZ_AJLT01000036.1	-	4218	4155	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Gsp-2-1	NZ_APHJ01000020.1	-	9198	9135	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1347	KGLS1_ANT01_95m.c10037026	-	89	26	RNA→	
env-1348	KGLS1_ANT02_95m.c10022116	+	2196	2259	RNA→	
env-1349	JGI1221J11331_1000234	-	4346	4283	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1350	KGLS1_ANT01_95m.c10095535	-	799	736	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Gec-1-1	NZ_KE383973.1	-	8392	8330	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

Gpo-1-1	NZ_AUHF01000001.1	-	869907	869845	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1351	CESL01230473.1	+	117	179	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1352	CESF01213480.1	+	362	424	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1353	CETA01214501.1	-	215	153	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Gfo-1-1	NC_008571.1	-	445156	445094	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→ Pnp (COG1185)PRK11824 (PRK11824)→
						hypo→ hypo→ hypo→
env-1354	CEVK01150598.1	+	458	520	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1355	CEVO01219582.1	+	51	113	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1356	CETX01274527.1	-	892	830	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1357	CEUY01486981.1	+	1938	2000	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1358	CETR01013089.1	-	4212	4150	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1359	CETS01018170.1	+	146	208	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1360	CEOS01036999.1	+	5728	5790	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1361	CEPD01004855.1	+	10048	10110	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1362	CERQ01017587.1	-	4212	4150	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1363	CETA01098167.1	-	4212	4150	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1364	CETG01119913.1	-	4015	3953	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1365	CEUX01200289.1	-	611	549	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1366	CEVI01039718.1	+	2211	2273	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Zpr-1-1	NC_014041.1	-	1015479	1015417	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1367	CEOX01230633.1	+	1223	1285	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1368	CETU01337419.1	-	615	553	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1369	CEVM01259718.1	+	226	288	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1370	CETM01453121.1	-	2692	2630	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1371	CESL01138425.1	-	5314	5252	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1372	CEVA01504643.1	-	1690	1628	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1373	CETB01101212.1	-	4212	4150	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1374	CETO01054190.1	-	4212	4150	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1375	CETT01093762.1	-	4212	4150	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1376	CEVJ01161702.1	+	426	488	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1377	CEWI01262926.1	-	4015	3953	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1378	JGI1221J11331_1000144	-	6864	6801	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1379	CEVI01097594.1	-	909	846	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1380	CESF01293253.1	-	867	804	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1381	CEVA01269270.1	-	286	223	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1382	JGI11876J14442_10131815	-	547	484	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1383	ElkS_mat_MD6A_1190057	-	183	120	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ssp-1-1	NZ_JQNQ01000001.1	+	899638	899701	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Tse-1-1	NZ_JTDW01000005.1	+	421254	421317	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Lsp-2-1	NZ_JYNQ01000001.1	-	2806058	2805994	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Jpa-1-1	NZ_BBNS01000015.1	-	28578	28513	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Jpa-1-2	NZ_BBNR01000016.1	+	55491	55556	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Jpa-1-3	NZ_BBNY01000095.1	+	87840	87905	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Ssp-2-1	NZ_JHZX01000001.1	-	2892930	2892865	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1384	JGI24023J19991_10003832	+	3258	3322	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1385	SA_S1_NOR08_45m.c10123497	-	596	531	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1386	SA_S1_NOR05_45m.c10247099	+	238	303	RNA→	rpsO (PRK05626)→
env-1387	KGLS2_ANT05_2345m.c1162791	+	181	246	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1388	KGLS1_ANT03_95m.c1210231	-	114	49	RNA→	hypo→
env-1389	KGLS1_ANT01_95m.c10052137	-	700	635	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1390	KGLS1_ANT02_95m.c10092914	+	320	385	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1391	SA_S2_NOR15_50m.c10267897	+	343	408	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1392	CEVA01348977.1	-	69	4	RNA→	

env-1393	CEQX01182899.1	+	35	100	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1394	CEUN01355620.1	+	760	825	RNA→	
env-1395	CESF01312563.1	-	1354	1289	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1396	ElkS_mat_MD6A_1000645	-	997	932	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1397	JGI11876J14442_10001894	-	4964	4899	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1398	CGULGFPCP3IQ02HOG5X	-	70	5	RNA→	
env-1399	CEVA01011410.1	-	380	315	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1400	CEQH01190568.1	-	69	4	RNA→	
env-1401	CEUN01165117.1	+	490	555	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1402	CEUF01199729.1	-	259	194	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1403	JGI11876J14442_10807421	-	249	184	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1404	TDF_OR_ARG04_113m_c1142939	+	11	76	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1405	KGLS1_ANT03_95m_c1006422	+	12	77	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1406	KGLS1_ANT01_95m_c10028809	-	1106	1041	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1407	KGLS1_ANT01_95m_c10013761	+	2777	2842	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1408	KGLS2_ANT06_2345m_c1017384	-	817	752	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1409	KGLS2_ANT04_2345m_c1018151	-	817	752	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1410	KGLS1_ANT02_95m_c10015429	-	1648	1583	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1411	SA_S1_NOR08_45m_c10818453	+	54	119	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Wsp-1-1	NZ_AP014583.1	-	2199375	2199310	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1412	KGLS1_ANT01_95m_c10108529	+	255	320	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1413	SA_S1_NOR05_45m_c10222323	-	117	52	RNA→	
env-1414	KGLS1_ANT02_95m_c10018235	+	1331	1396	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1415	KGLS1_ANT01_95m_c10439590	-	216	151	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1416	JGI24024J18818_10456388	-	203	138	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Bar-1-1	NZ_AFXZ01000012.1	+	168728	168815	RNA→	rpsO (PRK05626)RpsO (COG0184)→ rpsO (PRK05626)RpsO (COG0184)→
env-1417	JGI24724J26744_10000170	-	8375	8311	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1418	CEWQ01060895.1	-	188	124	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1419	CESO01252919.1	+	473	537	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1420	JGI12097J13213_1000798	-	3534	3470	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Pme-1-1	NZ_JXJP01000001.1	-	451220	451155	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1421	CEWR01222457.1	-	577	512	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Psp-5-1	NZ_JUGU01000001.1	-	3801057	3800992	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Pbu-1-1	NZ_AUDE01000023.1	-	4567	4502	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1422	JGI24025J20009_10010090	+	1129	1194	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1423	JGI24724J26744_10030194	-	1651	1586	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1424	JGI24723J26617_10025495	-	1546	1481	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1425	SA_S1_NOR08_45m_c10367044	+	199	264	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Pja-1-1	NZ_JSWG01000009.1	-	755527	755462	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1426	JGI24724J26744_10068913	-	1143	1078	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1427	JGI24723J26617_10012390	+	378	443	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1428	JGI24723J26617_10058375	-	123	58	RNA→	
env-1429	JGI20151J14362_10049778	+	238	303	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1430	JGI20156J14371_10001957	-	2149	2084	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1431	JGI20158J14315_10011911	+	3564	3629	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1432	CERM01194957.1	+	488	553	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1433	2236876011_209432	+	56	121	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1434	JGI11876J14442_10001335	-	9660	9595	RNA→	rpsO (PRK05626)RpsO (COG0184)→ hypo→
env-1435	ElkS_mat_MD6A_1062416	+	49	114	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1436	KGLS2_ANT04_2345m_c1011179	-	642	578	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Oma-1-1	NZ_KI912443.1	-	246097	246033	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1437	wf3_AHAI12229_x1	-	290	226	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-1438	JGI24724J26744.10003514	-	4752	4688	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1439	CESF01013150.1	-	383089	383025	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1440	CES001127605.1	-	775	711	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Sze-1-1	NZ_CP007202.1	-	1742017	1741953	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→ hypo→
Gsa-1-1	NZ_AUDV01000006.1	+	383148	383212	RNA→	rpsO (PRK05626)RpsO (COG0184)→ hypo→ hypo→
env-1441	KGLS1_ANT01.95m.c10171289	-	192	128	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1442	ElkS.mat_MD6A.1000561	-	14496	14432	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1443	JGI11876J14442.10000603	-	26866	26802	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Mze-1-1	NZ_KE383820.1	-	249635	249571	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1444	CEUX01207121.1	+	1570	1634	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1445	KGLS2_ANT04.2345m.c1032766	-	578	514	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1446	KGLS1_ANT02.95m.c10040186	+	144	208	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1447	SA_S1_NOR02.45m.c1045496	-	449	385	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1448	SA_S2_NOR13.50m.c1120752	+	50	114	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1449	SA_S2_NOR13.50m.c1031479	-	458	394	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1450	SA_S1_NOR05.45m.c10015538	+	1854	1918	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-1451	SA_S1_NOR08.45m.c10002201	-	821	757	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-1452	SA_S2_NOR15.50m.c10001453	+	9897	9961	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-1453	SA_S2_NOR18.50m.c1054082	+	176	240	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1454	KGLS1_ANT02.95m.c10590781	+	23	87	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1455	wf3_AHAI10363.y1	-	203	139	RNA→	rpsO (PRK05626)→
Wps-1-1	NZ_ATMR01000007.1	+	31896	31960	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1456	wf1_AGZO11054.b2	+	348	412	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1457	JGI24723J26617.10002165	+	14707	14771	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Osp-2-1	NZ_JADT01000002.1	+	86800	86864	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Osp-1-1	NZ_JADS01000007.1	+	86864	86928	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1458	JGI24724J26744.10155390	+	492	556	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1459	JGI24723J26617.10081657	+	261	325	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1460	SA_S1_NOR08.45m.c10027555	+	957	1021	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1461	JGI24724J26744.10015488	+	1261	1325	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1462	JGI24723J26617.10001993	+	11787	11851	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1463	KGLS1_ANT02.95m.c10261135	+	309	373	RNA→	hypo→
Lsp-1-1	NC.015638.1	+	582743	582807	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1464	SA_S2_NOR15.50m.c10085505	+	209	273	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1465	KGLS1_ANT02.95m.c10028795	+	1129	1193	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1466	KGLS1_ANT01.95m.c10028466	-	325	261	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1467	KGLS2_ANT06.2345m.c1003951	-	969	905	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1468	KGLS2_ANT05.2345m.c1024722	+	428	492	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1469	KGLS2_ANT06.2345m.c1002277	-	564	500	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1470	KGLS1_ANT03.95m.c1005571	+	822	886	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1471	CEQG01149785.1	-	2866	2802	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Fba-5-1	NZ_ABHI01000002.1	-	642916	642852	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fic-1-1	NZ_KN525716.1	+	1154245	1154309	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→ hypo→
env-1472	JGI24025J20009.10267879	-	111	47	RNA→	hypo→
Lja-1-1	NZ_JSWF01000036.1	+	51771	51835	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1473	JGI24025J20009.10053124	-	1206	1142	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Fba-8-1	NZ_ALIH01000008.1	-	90157	90221	RNA→	rpsO (PRK05626)RpsO (COG0184)→ hypo→ hypo→
env-1474	JGI24723J26617.10480515	+	213	149	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1475	JGI11876J14442.10711006	-	246	182	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1476	JGI24723J26617.10000349	-	8866	8802	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1477	SA_S1_NOR05.45m.c10059526	-	797	733	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1478	SA_S2_NOR15.50m.c10011596	-	1359	1295	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-1479	SA_S1_NOR08.45m.c10057202	+	230	294	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1480	SA_S1_NOR08.45m.c10566095	-	249	185	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1481	SA_S2_NOR15.50m.c10000178	+	21761	21825	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1482	KGLS1_ANT03.95m.c1016120	-	66	2	RNA→	
env-1483	CEUD01278901.1	+	657	721	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1484	KGLS1_ANT01.95m.c10027578	-	798	734	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1485	SA_S1_NOR05.45m.c10358528	+	155	219	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1486	SA_S1_NOR08.45m.c10002212	-	620	556	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1487	SA_S2_NOR15.50m.c10549841	-	196	132	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1488	KGLS1_ANT02.95m.c10003746	-	2134	2070	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1489	SA_S1_NOR05.45m.c10195079	+	321	385	RNA→	hypo→
env-1490	SA_S1_NOR02.45m.c1140729	+	236	300	RNA→	←hypo
env-1491	JGI20152J14361.10000356	+	14689	14753	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1492	JGI20154J14316.10013934	-	3274	3210	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1493	JGI20160J14292.10006817	-	6691	6627	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1494	JGI20153J14295.10001021	+	14651	14715	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1495	JGI20153J14318.10001021	+	14651	14715	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1496	A09P04.1300.Sequence0000005964	-	443	379	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1497	SA_S1_NOR05.45m.c10061437	+	558	622	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1498	SA_S2_NOR15.50m.c10172884	-	143	79	RNA→	rpsO (PRK05626)→
env-1499	SA_S2_NOR18.50m.1220507	-	273	209	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1500	SA_S1_NOR08.45m.c10021859	-	176	112	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1501	SA_S2_NOR15.50m.c10038244	-	971	907	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-1502	SA_S1_NOR05.45m.c10068838	+	336	400	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1503	SA_S1_NOR08.45m.c10016610	+	2682	2746	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-1504	SA_S1_NOR08.45m.c10435309	+	269	333	RNA→	
env-1505	SA_S1_NOR08.45m.c10144408	-	487	423	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
env-1506	KGLS2_ANT04.2345m.c1296240	-	281	217	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Pda-1-1	NZ_JXJO01000023.1	+	45518	45582	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1507	SA_S1_NOR08.45m.c10764472	-	134	71	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1508	BS_KBA_SWE12.21m.c10000055	+	27026	27089	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1509	BS_KBB_SWE26.205m.c1007908	+	294	357	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1510	BS_KBB_SWE26.205m.c1015589	+	493	556	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1511	BS_KBA_SWE07.21m.c1008693	+	159	222	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1512	BS_KBA_SWE21.205m.10000856	+	7869	7932	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1513	BS_KBA_SWE21.205m.10001614	-	7075	7012	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1514	BS_KBA_SWE02.21m.10000074	+	25016	25079	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1515	3300001592.10093314	-	181	117	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1516	KVRMV2.100601001	+	114	178	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1517	CEOS01128007.1	-	419	357	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1518	CERQ01221307.1	+	319	381	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1519	BS_KBA_SWE21.205m.10160982	-	121	58	RNA→	hypo→
env-1520	BS_KBA_SWE02.21m.10189888	-	297	234	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1521	BS_KBA_SWE12.21m.c10156796	+	253	316	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1522	CEQZ01049836.1	-	1155	1068	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1523	CERU01038294.1	-	1201	1114	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Fsp-14-1	NZ_ANLA01000005.1	-	82448	82361	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1524	CERY01028704.1	-	371	284	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1525	KGLS1_ANT01.95m.c10252634	-	205	141	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1526	KGLS1_ANT02.95m.c10380062	-	148	84	RNA→	rpsO (PRK05626)→
env-1527	SA_S1_NOR08.45m.c10034326	+	179	243	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1528	TB_PC08.66.10134032	+	487	551	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-1529	BS_KBB_SWE26_205m.c1003922	+	1790	1854	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1530	BS_KBA_SWE12_21m.c10003244	-	3098	3034	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1531	BS_KBB_SWE26_205m.c1000422	+	8956	9020	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1532	BS_KBA_SWE21_205m_10001432	+	5368	5432	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1533	BS_KBA_SWE02_21m_10001031	-	1511	1447	RNA→	rpsO (PRK05626)RpsO (COG0184)→
Fag-1-1	NZ_HG315671.1	-	573237	573173	RNA→	rpsO (PRK05626)RpsO (COG0184)→
¹ env-1534	KGLS1_ANT01_95m.c10197802	+	270	324	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1535	KGLS1_ANT01_95m.c10417003	+	73	137	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1536	KGLS1_ANT01_95m.c10197802	+	146	210	RNA→	rpsO (PRK05626)→ rpsO (PRK05626)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1537	KGLS2_ANT04_2345m.c1079454	-	304	240	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1538	SA_S1_NOR05_45m.c10195650	-	251	186	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1539	SA_S2_NOR13_50m.c1186424	+	131	196	RNA→	rpsO (PRK05626)→
env-1540	SA_S1_NOR08_45m.c10053497	-	624	559	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1541	KGLS1_ANT02_95m.c10081391	+	477	542	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1542	KGLS1_ANT01_95m.c10127393	-	466	401	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1543	SA_S1_NOR05_45m.c10021755	+	211	276	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1544	SA_S2_NOR15_50m.c10037074	-	1773	1708	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1545	SA_S2_NOR18_50m_1058205	+	140	205	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1546	SA_S1_NOR02_45m.c1038615	+	422	487	RNA→	rpsO (PRK05626)→
env-1547	SA_S1_NOR05_45m.c10018119	+	1240	1305	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1548	JGI24024J18818_10009536	-	3130	3065	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1549	SA_S1_NOR08_45m.c10538363	+	246	311	RNA→	→
env-1550	JGI24024J18818_10055265	+	859	923	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1551	JGI24023J19991_10458387	-	291	227	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1552	SA_S2_NOR15_50m.c10835355	-	217	153	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1553	SA_S1_NOR08_45m.c10167461	-	625	561	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1554	SA_S1_NOR08_45m.c10626463	+	221	285	RNA→	→
env-1555	JGI11876J14442_10165063	+	433	498	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1556	ElkS_mat_MD6A_1051781	-	206	141	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1557	ElkS_mat_MD6A_1006443	+	2218	2283	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1558	JGI11876J14442_10009103	-	1440	1375	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1559	SA_S1_NOR02_45m.c1138063	-	201	137	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1560	SA_S1_NOR05_45m.c10066143	+	481	545	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1561	SRS043422_C2682413	+	1246	1291	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1562	SRS046686_C887109	+	19	64	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1563	Buccal_mucosa_LANL_scaffold_1631	+	636	681	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1564	SRS014687_C1256631	-	75	30	RNA→	→
env-1565	SRS013506_C1077366	+	303	348	RNA→	→
env-1566	TrichMG_c100003	-	114945	114878	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Zam-1-1	NZ_AYXY01000022.1	+	24468	24536	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1567	JGI24770J26754_10002254	-	8613	8546	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ffr-2-1	NZ_AHKF01000016.1	-	97801	97735	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1568	KGLS1_ANT01_95m.c10016611	-	1987	1921	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1569	KGLS2_ANT04_2345m.c1022905	-	1437	1371	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1570	KGLS1_ANT02_95m.c10016777	-	2633	2567	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsp-2-1	NZ_JQMS01000001.1	-	1756958	1756892	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1571	JGI24770J26754_10342540	-	429	363	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1572	KGLS1_ANT01_95m.c10332605	-	256	190	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1573	KGLS1_ANT01_95m.c10257100	+	199	265	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1574	KGLS1_ANT02_95m.c10031472	+	1706	1772	RNA→	→
env-1575	KGLS1_ANT01_95m.c10019254	-	1136	1070	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-1576	KGLS2_ANT06.2345m.c1022245	-	116	50	RNA→	
Fsp-5-1	NZ_JSYM01000001.1	-	1738792	1738726	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fsp-3-1	NZ_LEKS01000001.1	-	40307	40241	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1577	KGLS2_ANT04.2345m.c1000215	+	4350	4416	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1578	KGLS1_ANT02.95m.c10005510	-	1136	1070	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1579	KGLS1_ANT01.95m.c10022295	-	134	68	RNA→	hypo→
Fsp-4-1	NZ_AJXL010000050.1	-	10986	10920	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1580	JGI26055J44792.1116768	+	87	134	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1581	JGI25831J46370.119340	-	174	127	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Wma-1-1	NZ_CCMH01000008.1	-	91520	91474	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Wvi-1-1	NC_015144.1	-	1924258	1924211	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Orh-1-1	NC_018016.1	+	365476	365528	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Orh-3-1	NZ_CP006828.1	+	371699	371751	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Orh-2-1	NZ_AXDE01000002.1	+	306778	306830	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1582	3300001197.1085176	-	1056	1010	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1583	APMI01076955.1	+	2558	2605	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1584	JGI25853J50183.17647	-	50	4	RNA→	
env-1585	3300001592.10080689	-	473	427	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1586	JGI26538J50259.1000062	+	73740	73786	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1587	3300001592.10000999	+	9714	9760	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1588	2210193624	+	353	399	RNA→	
Ebr-1-1	NZ_KB908301.1	+	70085	70131	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1589	JGI26051J44788.1005993	+	1041	1087	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1590	JGI26053J44789.1004649	+	636	682	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1591	JGI26055J44792.1013313	-	518	472	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1592	JGI26057J44791.1000035	+	25918	25964	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1593	JGI26054J46599.1000016	-	39347	39301	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1594	JGI26052J44787.1039558	+	277	323	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Efa-1-1	NZ_JSYQ01000009.1	+	118305	118351	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1595	JGI26050J44790.1040856	-	81	35	RNA→	hypo→
Bzo-1-1	NZ_JH932293.1	-	2055058	2055010	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Bzo-2-1	NZ_JH932282.1	+	1022343	1022391	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1596	CEVG01031283.1	+	424	489	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1597	CEWK01195648.1	-	283	218	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1598	CEPJ01242679.1	-	79	14	RNA→	
env-1599	CEWH01147159.1	+	7783	7848	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1600	JCVL_SCAF_1101667581186	+	571	636	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1601	CEVH01171373.1	+	701	766	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1602	CEUH01137174.1	-	914	849	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1603	CEVG01256217.1	-	217	152	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1604	CEWK01191961.1	+	343	408	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1605	CEVS01311665.1	+	167	232	RNA→	rpsO (PRK05626)RpsO (COG0184)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-1606	CEOM01011442.1	-	239	174	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1607	JCVI_READ_1104230051515	-	1009	945	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)RNase_PH_C (pfam03725)→
env-1608	CENF01403979.1	+	590	654	RNA→	rpsO (PRK05626)RpsO (COG0184)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1609	CEOC01304602.1	-	743	678	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1610	CETE01250240.1	-	394	329	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1611	CEUR01041503.1	-	281	216	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1612	CEVG01012585.1	-	211	146	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1613	CEWG01074623.1	+	1532	1597	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1614	CENG01192212.1	-	188	123	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-1615	CENO01053689.1	+	270	335	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-1616	CEUM01074299.1	+	1019	1084	RNA→	
env-1617	CEUV01130266.1	-	5263	5198	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ Pnp (COG1185)PRK11824 (PRK11824)→ PLN02198 (PLN02198)Ggt (COG0405)→ PRK10115 (PRK10115)PtrB (COG1770)→
env-1618	CEVH01019235.1	-	182	117	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1619	CEWH01078602.1	-	279	214	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1620	JCVI_SCAF_1096627336466	+	264	329	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1621	JCVI_SCAF_1096628013630	-	1884	1819	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1622	sludgePhrap_Contig10770	+	80	144	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1623	JGI25920J50251_10058504	+	359	425	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1624	JGI25911J50253_10258121	-	271	205	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1625	JGI25910J50241_10053410	-	957	891	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1626	JGI25910J50241_10095017	-	415	349	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1627	JGI25910J50241_10069387	+	906	972	RNA→	
env-1628	JGI12421J11937_10000034	+	36707	36773	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1629	LM20APR2010E_c396	+	1869	1935	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1630	TB_PC08.66_10060944	-	109	43	RNA→	
env-1631	TB_GS09.5_10171935	-	305	239	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1632	TB_PC08.66_10061930	+	1206	1272	RNA→	
env-1633	AglaG_GDN60OX02HZEN	-	102	35	RNA→	
env-1634	JGI24770J26754_10074152	+	350	417	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1635	TB03JUN2009E_Contig_145064	-	74	7	RNA→	
Faq-1-1	NZ_JRHH01000001.1	-	229487	229420	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1636	JFJP01044092.1	-	4887	4820	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1637	JFJP01001225.1	+	19883	19950	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1638	SRS045197_WUGC_scaffold_71844	+	1187	1244	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1639	SRS053584_LANL_scaffold_46820	+	1187	1244	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1640	SRS015803_WUGC_scaffold_1822	-	19092	19035	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1641	SRS018157_Baylor_scaffold_79748	+	2305	2362	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1642	SRS019077_WUGC_scaffold_63873	-	412	355	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Csp-6-1	NZ_AKFR01000034.1	+	60045	60102	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1643	SRS047113_C5238338	-	69	13	RNA→	
env-1644	SRS024144_C1787925	+	808	864	RNA→	
env-1645	SRS043772_WUGC_scaffold_9035	+	507	563	RNA→	rpsO (PRK05626)→
Coc-2-1	NZ_JVFB01000069.1	-	264032	263976	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1646	SRS014578_WUGC_scaffold_50948	-	289	233	RNA→	
Csp-9-1	NZ_KB291210.1	+	18472	18527	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1647	SRS011343_Baylor_scaffold_28900	+	921	976	RNA→	
env-1648	SRS015215_WUGC_scaffold_40668	-	90	35	RNA→	
env-1649	SRS024087_C3535890	-	68	13	RNA→	
env-1650	SRS018337_Baylor_scaffold_6407	+	3	58	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1651	SRS055378_LANL_scaffold_11295	-	202	147	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1652	SRS011255_Baylor_scaffold_50639	-	90	35	RNA→	
env-1653	SRS014476_WUGC_scaffold_37616	-	90	35	RNA→	
env-1654	SRS016043_WUGC_scaffold_47910	-	90	35	RNA→	
env-1655	SRS021960_Baylor_scaffold_21591	+	91	146	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1656	SRS013252_Baylor_scaffold_38320	-	68	13	RNA→	
env-1657	SRS053917_LANL_scaffold_37634	-	1535	1481	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Coc-3-1	NZ_GL573160.1	+	348550	348604	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Coc-4-1	NZ_AKFV01000036.1	+	171648	171702	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Coc-1-1	NC_013162.1	+	2020418	2020473	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Csp-7-1	NZ_KE150489.1	-	245846	245793	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

Csp-10-1	NZ_AJZR01000054.1	+	24577	24630	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Csp-2-1	NZ_KB291539.1	+	18156	18209	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1658	G312J29652_10291633	+	142	208	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1659	M3P_c10401073	-	92	26	RNA→	hyp0→	
env-1660	JGI25913J50563_1004702	-	1156	1090	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1661	3300000052_045724	+	487	553	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1662	JGI25913J50563_1032633	+	701	767	RNA→		
env-1663	JCVL_SCAF_1101668144518	-	828	762	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1664	SRS043422.LANL_scaffold_27461	+	70	126	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1665	SRS013533.PGA_scaffold_76303	+	331	387	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1666	SRS014888.C3093205	-	468	412	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1667	SRS050669.LANL_scaffold_37527	-	1248	1192	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1668	SRS015063.C2120774	+	197	253	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1669	SRS015762.WUGC_scaffold_51343	-	4350	4294	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1670	SRS019029.WUGC_scaffold_45090	+	1155	1211	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1671	SRS019122.C5910877	-	652	596	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1672	SRS057205.LANL_scaffold_58800	+	12511	12567	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1673	SRS016092.C1171386	+	397	453	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1674	SRS017227.Baylor_scaffold_110356	-	740	684	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1675	SRS019591.WUGC_scaffold_42767	-	4361	4305	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1676	SRS019027.C1985251	-	2922	2866	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
Csp-4-1	NZ_KN389985.1	-	83839	83783	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1677	SRS019077.C2547620	-	115	59	RNA→	rpsO (PRK05626)→	
env-1678	SRS063288.C2556324	+	441	497	RNA→	rpsO (PRK05626)→	
env-1679	SRS019906.WUGC_scaffold_52431	-	674	618	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1680	SRS021960.C2067122	+	215	271	RNA→		
env-1681	SRS023538.Baylor_scaffold_38631	+	1459	1515	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1682	SRS024289.C2070569	-	115	59	RNA→	rpsO (PRK05626)→	
env-1683	SRS045715.C4722109	-	89	33	RNA→		
env-1684	SRS050244.LANL_scaffold_99594	+	959	1015	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1685	SRS051378.C1779297	-	115	59	RNA→	rpsO (PRK05626)→	
env-1686	SRS054653.C1990320	+	34	90	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1687	SRS058336.C2081196	+	224	280	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1688	Buccal_mucosa.LANL_scaffold_150368	-	636	580	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1689	SRS023930.C2191794	-	1919	1863	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1690	SRS018975.WUGC_scaffold_37944	+	424	480	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1691	SRS012285.Baylor_scaffold_28847	-	817	761	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1692	SRS014473.C1058379	+	108	164	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1693	SRS015044.WUGC_scaffold_70508	+	49	105	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1694	SRS015434.C5932842	+	276	332	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1695	SRS015899.WUGC_scaffold_29136	+	830	886	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1696	SRS016297.C532059	+	45	101	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1697	SRS018300.Baylor_scaffold_13428	+	11276	11332	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1698	SRS019071.C5001202	+	275	331	RNA→		
env-1699	SRS019225.WUGC_scaffold_37789	+	737	793	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1700	SRS021477.Baylor_scaffold_50396	+	770	826	RNA→	rpsO (PRK05626)→	
env-1701	SRS022725.LANL_scaffold_57376	+	10486	10542	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1702	SRS023595.Baylor_scaffold_65314	-	1031	975	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1703	SRS024355.LANL_scaffold_78151	+	324	380	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1704	SRS065099.LANL_scaffold_43567	-	1245	1189	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1705	SRS047634.LANL_scaffold_56906	+	930	986	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1706	SRS050628.C1885263	+	48	104	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	

env-1707	SRS051941.LANL_scaffold_40092	-	624	568	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	PRK11824 (PRK11824)RNase_PH (pfam01138)→
env-1708	SRS057022.C1966776	-	419	363	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1709	SRS020222.C1001786	+	45	101	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1710	SRS063215.LANL_scaffold_746	+	1746	1802	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
Cko-1-1	NZ_LFNG01000006.1	-	73410	73364	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1711	SRS019128.WUGC_scaffold_40428	-	250	198	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1712	SRS024561.LANL_scaffold_27863	-	246	194	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1713	SRS063932.LANL_scaffold_85576	-	294	242	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1714	SRS011126.Baylor_scaffold_15902	-	467	415	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1715	SRS016360.Baylor_scaffold_10965	+	1870	1922	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1716	SRS017227.Baylor_scaffold_133947	+	2861	2913	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1717	SRS018665.WUGC_scaffold_9476	-	1439	1387	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1718	SRS024087.C3338429	+	348	400	RNA→		
env-1719	SRS063999.C3578431	-	65	13	RNA→		
env-1720	SRS052876.LANL_scaffold_43042	-	2813	2761	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1721	SRS063603.LANL_scaffold_104178	+	1536	1588	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1722	SRS015803.WUGC_scaffold_46814	+	633	685	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
Csp-5-1	NZ_KB291273.1	+	7305	7357	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1723	SRS047113.LANL_scaffold_40316	-	65	13	RNA→		
env-1724	BS_KBA_SWE02_21m_10002378	-	6637	6571	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1725	BS_KBA_SWE12_21m_c10257970	-	316	250	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1726	BS_KBA_SWE21_205m_10065151	-	791	725	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1727	BS_KBA_SWE07_21m_c1084691	+	116	182	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
Csp-8-1	NZ_GL872413.1	+	1146487	1146540	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1728	SRS013950.C2010154	+	28	81	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1729	SRS024381.LANL_scaffold_23096	-	964	909	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1730	SRS064329.C2708069	+	592	647	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1731	SRS012279.C2755382	+	1578	1633	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1732	SRS016319.C4022715	-	1914	1859	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1733	SRS017209.Baylor_scaffold_62146	+	1830	1885	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1734	SRS018300.Baylor_scaffold_54476	-	1573	1518	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1735	SRS019122.C5923314	-	6524	6469	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1736	SRS019127.C1675613	+	2142	2197	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1737	SRS021496.Baylor_scaffold_73479	-	8230	8175	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1738	SRS022077.Baylor_scaffold_57464	+	1502	1557	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1739	SRS022530.LANL_scaffold_23647	-	9977	9922	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1740	SRS024081.LANL_scaffold_27019	-	8253	8198	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1741	SRS050244.LANL_scaffold_22625	+	4127	4182	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1742	SRS050669.LANL_scaffold_21743	-	1678	1623	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1743	SRS063288.C2588099	-	397	342	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1744	SRS011126.Baylor_scaffold_9375	+	632	687	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1745	SRS013533.PGA_scaffold_2853	+	34	89	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1746	SRS015063.WUGC_scaffold_46448	+	1494	1549	RNA→		
env-1747	SRS018665.C3617939	+	376	431	RNA→		
env-1748	SRS018778.C1276842	-	1257	1202	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1749	SRS019980.Baylor_scaffold_28622	+	2149	2204	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1750	SRS020340.C2796995	+	244	299	RNA→		
env-1751	SRS043755.WUGC_scaffold_43382	+	2651	2706	RNA→		
env-1752	SRS023964.C2569817	-	445	390	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1753	SRS049268.C4218766	-	234	179	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1754	SRS058336.C2129811	-	202	147	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1755	SRS063215.C2276132	-	206	151	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	

Cgi-1-1	NZ_ACLQ01000019.1	-	321176	321120	RNA→	rpsO (PRK05626)RpsO (COG0184)→	rpsO (PRK05626)RpsO (COG0184)→
env-1756	SRS053630.C926066	+	2157	2212	RNA→		
env-1757	Tongue_dor_WUGL_scaffold_5146	+	1830	1885	RNA→		
env-1758	SRS013705.C3757970	+	419	474	RNA→		
env-1759	SRS014573.C3640759	+	448	503	RNA→		
env-1760	SRS015762.WUGC_scaffold_51227	-	69	14	RNA→		
env-1761	SRS016225.C2972871	+	722	777	RNA→		
env-1762	SRS019071.WUGC_scaffold_32009	+	372	427	RNA→		
env-1763	SRS042131.WUGC_scaffold_54007	+	6552	6607	RNA→		
env-1764	SRS057205.C3544919	+	1708	1763	RNA→		
env-1765	SRS012285.Baylor_scaffold_29593	+	360	415	RNA→		
env-1766	SRS014888.C3089015	-	58	3	RNA→		
env-1767	SRS018357.C3820809	+	107	162	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1768	SRS018739.C3515427	-	340	285	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1769	SRS019327.C2770117	+	716	771	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1770	SRS020226.Baylor_scaffold_48761	+	121	176	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1771	SRS021477.Baylor_scaffold_53832	-	3224	3169	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1772	SRS024138.Baylor_scaffold_48685	-	5719	5664	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1773	SRS049389.C4680666	+	115	170	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1774	SRS062544.C3032576	-	2729	2674	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1775	SRS016541.Baylor_scaffold_10002	-	8245	8190	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1776	SRS011343.Baylor_scaffold_51832	+	619	674	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1777	SRS018573.WUGC_scaffold_37052	-	745	690	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1778	SRS055401.LANL_scaffold_16367	-	3521	3466	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1779	SRS018439.C2379934	-	315	259	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1780	SRS011255.Baylor_scaffold_57867	+	143	199	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1781	SRS015755.WUGC_scaffold_31067	+	144	200	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1782	SRS017511.Baylor_scaffold_52784	-	1865	1809	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1783	SRS013949.C3427567	-	63	7	RNA→		
env-1784	SRS047265.C1018884	-	63	7	RNA→		
env-1785	SRS054430.C1991223	-	63	7	RNA→		
env-1786	SRS015215.C2602102	+	1914	1970	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1787	SRS018157.Baylor_scaffold_17243	+	5326	5382	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1788	SRS018394.Baylor_scaffold_16582	+	207	263	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1789	SRS018975.WUGC_scaffold_27725	-	2246	2190	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1790	SRS023538.C1297948	+	625	681	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1791	SRS024021.Baylor_scaffold_35694	-	3813	3757	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1792	SRS051930.LANL_scaffold_30198	-	1945	1889	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1793	SRS053584.LANL_scaffold_27427	+	1111	1167	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1794	SRS064449.LANL_scaffold_54476	-	821	765	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1795	SRS015797.WUGC_scaffold_40800	-	3734	3678	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1796	SRS049268.LANL_scaffold_48367	-	1235	1179	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1797	SRS016575.Baylor_scaffold_62429	-	468	412	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1798	SRS021960.Baylor_scaffold_32080	+	1206	1262	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1799	SRS043018.WUGC_scaffold_17072	-	1686	1630	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1800	SRS052604.C1741226	+	192	248	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1801	SRS075406.C835402	+	1492	1548	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→	
env-1802	SRS015044.C2954296	-	71	14	RNA→		
env-1803	SRS017445.Baylor_scaffold_67615	-	71	14	RNA→		
env-1804	SRS063999.LANL_scaffold_69744	-	714	657	RNA→	rpsO (PRK05626)RpsO (COG0184)→	
env-1805	SRS018443.C3761441	+	440	496	RNA→		
env-1806	SRS023841.Baylor_scaffold_2255	+	17160	17216	RNA→		

env-1807	SRS013723_Baylor_scaffold_96492	+	1691	1747	RNA→	
env-1808	SRS015158_C2638461	-	70	14	RNA→	
env-1809	SRS015899_C1864030	-	70	14	RNA→	
env-1810	SRS015989_WUGC_scaffold_9962	-	70	14	RNA→	
env-1811	SRS016331_C4186867	+	1034	1090	RNA→	
env-1812	SRS017227_Baylor_scaffold_129048	-	70	14	RNA→	
env-1813	SRS023938_Baylor_scaffold_54567	-	70	14	RNA→	
env-1814	SRS043772_C1805334	+	959	1015	RNA→	
env-1815	SRS047634_LANL_scaffold_135361	+	1682	1738	RNA→	
env-1816	SRS051941_LANL_scaffold_63198	-	70	14	RNA→	
env-1817	SRS055450_LANL_scaffold_60723	+	443	499	RNA→	
env-1818	SRS011098_Baylor_scaffold_47355	-	447	391	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1819	SRS011152_Baylor_scaffold_56328	-	448	392	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1820	SRS017139_Baylor_scaffold_22700	-	713	657	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1821	SRS013252_Baylor_scaffold_570	-	3369	3313	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1822	SRS024561_LANL_scaffold_19776	+	521	577	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1823	SRS014894_WUGC_scaffold_44021	+	2091	2147	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1824	SRS015278_WUGC_scaffold_55991	-	313	257	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1825	SRS047113_LANL_scaffold_63026	+	134	190	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1826	SRS016043_WUGC_scaffold_15210	+	52	108	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1827	SRS017025_C1711249	+	439	495	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1828	SRS022725_LANL_scaffold_39329	-	181	125	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1829	SRS056622_C2506152	-	456	400	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1830	SRS014578_WUGC_scaffold_10366	+	9436	9493	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1831	SRS016200_C2197115	+	122	179	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1832	SRS019225_WUGC_scaffold_3776	+	18738	18795	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1833	SRS053917_LANL_scaffold_17810	+	480	536	RNA→	RNase_PH_PNPase_1 (cd11363)PRK11824 (PRK11824)→
env-1834	SRS014476_WUGC_scaffold_21840	+	108	161	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1835	SRS015278_WUGC_scaffold_27115	-	448	395	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1836	SRS019073_C2403742	-	61	8	RNA→	
env-1837	SRS023938_C2280951	+	621	674	RNA→	
env-1838	SRS042984_LANL_scaffold_33434	-	1845	1792	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1839	SRS045197_WUGC_scaffold_57665	+	563	616	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1840	SRS011126_Baylor_scaffold_28444	-	814	761	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1841	SRS013723_Baylor_scaffold_97854	+	595	648	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1842	SRS018157_Baylor_scaffold_39858	+	111	164	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1843	SRS022536_LANL_scaffold_17148	+	75494	75547	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1844	SRS049318_LANL_scaffold_66197	-	467	414	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1845	SRS065099_LANL_scaffold_25462	-	1601	1548	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1846	SRS011255_C2425047	+	575	628	RNA→	
env-1847	SRS014578_WUGC_scaffold_64330	+	620	673	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1848	SRS015899_C1850213	+	925	978	RNA→	
env-1849	SRS017445_C3104098	-	61	8	RNA→	
env-1850	SRS019980_C2969016	-	61	8	RNA→	
env-1851	SRS024144_C1802205	+	72	125	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1852	SRS043755_WUGC_scaffold_43461	-	467	414	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1853	SRS063932_LANL_scaffold_49231	+	1550	1603	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1854	Buccal_mucosa_LANL_scaffold_38424	+	493	546	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1855	SRS018665_WUGC_scaffold_60069	-	1584	1530	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1856	SRS015989_WUGC_scaffold_7147	-	469	415	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1857	SRS053917_LANL_scaffold_6591	+	5942	5996	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1858	SRS022725_LANL_scaffold_59028	+	5381	5435	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

env-1859	SRS015899.WUGC_scaffold_38801	-	470	416	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1860	SRS015158.WUGC_scaffold_8656	-	470	416	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1861	SRS043018.WUGC_scaffold_62457	+	332	386	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1862	SRS045197.WUGC_scaffold_57684	-	249	197	RNA→	rpsO (PRK05626)RpsO (COG0184)→
env-1863	SRS016360.Baylor_scaffold_47393	+	1132	1185	RNA→	
env-1864	SRS014477.C1535248	-	232	179	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1865	CEWR01254345.1	+	688	738	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Eme-2-1	NZ_BARD01000020.1	+	39213	39259	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→
Eme-2-2	NZ_ASAN01000003.1	+	99334	99380	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ hypo→ hypo→
Cca-1-1	NZ_JHXV01000017.1	+	23329	23378	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Emi-1-1	NZ_CP011059.1	+	4046339	4046387	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Cte-1-1	NZ_AUAA01000028.1	+	23283	23330	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Csp-15-1	NZ_JPLZ01000006.1	+	1840	1887	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cha-2-1	NZ_JPLY01000004.1	+	813621	813669	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Ean-3-1	NZ_CP006576.1	-	2427035	2426987	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-5-1	NZ_ASYK01000015.1	+	43042	43090	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-7-1	NZ_ASYJ01000011.1	-	311125	311077	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-1-1	NZ_CCAC010000078.1	-	65873	65825	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-1-2	NZ_CCAB010000101.1	-	104723	104675	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-1-3	NZ_LFKT01000009.1	+	119469	119517	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-11-1	NZ_CBYE010000026.1	+	27074	27122	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-2-1	NZ_AHHG01000045.1	-	182436	182388	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-8-1	NZ_CP007547.1	-	3067040	3066992	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Eme-1-1	NZ_AVCQ01000015.1	-	442021	441973	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-6-1	NZ_ASYI01000016.1	+	45322	45370	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-10-1	NZ_ASYG01000010.1	+	159214	159262	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-9-1	NZ_ASYF01000003.1	-	448232	448184	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-4-1	NZ_ASYH01000003.1	-	448359	448311	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-1-4	NZ_JNCG01000021.1	-	185482	185434	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Ean-12-1	NZ_ANIW01000060.1	-	190333	190285	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→ SMC_prok_A (TIGR02169)DUF1003 (pfam06210)→
Csp-18-1	NZ_KN050755.1	-	1438373	1438327	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cje-1-1	NZ_JSYL01000004.1	+	28177	28223	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1866	JGI26523J50269_1016856	-	1306	1260	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1867	JGI26527J51213_1032686	-	406	360	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1868	JGI26531J51214_10008686	-	2483	2437	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cha-1-1	NZ_JASZ010000256.1	+	10759	10805	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1869	JGI26530J50255_1106976	+	312	358	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1870	topACOD_contig19283	-	304	259	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Chi-1-1	NZ_JARQ01000003.1	+	453031	453077	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1871	3300001197_1001501	+	9230	9275	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cso-2-1	NZ_JSYK01000004.1	-	52246	52199	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cda-1-1	NZ_AUMT01000001.1	+	62762	62807	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cpi-1-1	NZ_JPRJ01000010.1	+	67169	67214	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1872	07_22_INULIN_DNA_scaffold18418_31	-	14224	14179	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Fba-4-1	NC_013062.1	-	480533	480488	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cfo-1-1	NZ_JPRP01000005.1	+	14172	14217	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1873	APMI01051208.1	-	1050	1005	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Clu-1-1	NZ_JPR01000006.1	-	65330	65285	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
env-1874	2200753365	-	6123	6078	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→
Cta-1-1	NZ_JWTA01000021.1	-	33380	33335	RNA→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)→

Csp-29-1	NZ_JUGT01000011.1	-	37505	37460	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-24-1	NZ_JUGI01000017.1	-	175541	175496	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-19-1	NZ_JUHD01000005.1	+	223343	223388	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cor-1-1	NZ_CCAV010000003.1	+	217492	217537	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cor-1-2	NZ_CDHM01000003.1	+	217492	217537	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-16-1	NZ_LFNE01000002.1	+	313537	313582	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Can-1-1	NZ_LFND01000006.1	-	295584	295539	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cgl-1-1	NZ_GL379781.1	-	3418094	3418049	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-26-1	NZ_KN549099.1	-	1525773	1525728	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-23-1	NZ_KI535291.1	+	490120	490165	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cin-2-1	NZ_BAVL01000002.1	+	189412	189457	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cso-1-1	NZ_JPRH01000003.1	+	437436	437481	RNA → rpsO (PRK05626) RpsO (COG0184) →
Csp-17-1	NZ_JPRN01000005.1	-	444957	444912	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-20-1	NZ_JUGX01000001.1	-	451596	451551	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1875	JGI24741J21665_1003225	+	547	592	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1876	SwRhRL2b_contig_2736501	-	126	81	RNA → rpsO (PRK05626) RpsO (COG0184) →
Csp-27-1	NZ_JUGN01000014.1	-	542127	542082	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-28-1	NZ_JUGO01000011.1	+	158290	158335	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cin-1-1	NZ_LAZY010000038.1	-	61237	61192	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-13-1	NZ_LFNF01000003.1	+	556712	556757	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-21-1	NZ_JPEQ01000008.1	-	148879	148834	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-25-1	NZ_KN549083.1	+	153277	153322	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-22-1	NZ_AP014624.1	+	1694760	1694805	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cga-1-1	NZ_CP009928.1	+	3037125	3037170	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cvr-1-1	NZ_JPRI01000002.1	-	96400	96355	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-14-1	NZ_JQJM01000004.1	+	231770	231815	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1877	JGI24735J21928_10576231	-	306	261	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1878	SRS050628.LANL_scaffold_18598	+	464	518	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-1879	SRS023595.C6923925	-	62	7	RNA →
env-1880	JGI26529J51215_1088893	-	319	271	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1881	JGI26530J50255_1057323	-	544	496	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1882	JGI26527J51213_1015831	-	1014	966	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1883	JGI25921J50272_10550746	-	155	89	RNA →
env-1884	SRS011243.Baylor_scaffold_47946	-	2597	2550	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1885	SRS013164.Baylor_scaffold_59591	-	4089	4042	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1886	SRS014124.WUGC_scaffold_51556	-	1480	1433	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1887	SRS018739.C3569612	+	103	150	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1888	SRS019327.WUGC_scaffold_53864	-	2020	1973	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1889	SRS022719.LANL_scaffold_27291	+	47554	47601	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1890	SRS050669.LANL_scaffold_22387	+	10680	10727	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1891	SRS077736.LANL_scaffold_38299	+	9035	9082	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1892	SRS015060.C1545315	+	15	62	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1893	SRS015434.C5634447	-	55	8	RNA →
env-1894	SRS018300.Baylor_scaffold_41675	+	423	470	RNA →
env-1895	SRS019071.C5124367	+	543	590	RNA →
env-1896	SRS024441.C2974660	+	377	424	RNA →
env-1897	SRS050244.LANL_scaffold_85939	+	1274	1321	RNA →
env-1898	SRS015762.C3672449	-	55	8	RNA →
env-1899	SRS054687.C3386725	-	55	8	RNA →
env-1900	SRS015803.WUGC_scaffold_2285	+	78	125	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1901	SRS016037.C2014584	-	305	258	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1902	SRS016200.WUGC_scaffold_25492	-	60	13	RNA →

env-1903	SRS016569.C2492960	+	724	771	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1904	SRS018357.Baylor_scaffold_29493	-	767	720	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1905	SRS019045.C2658954	+	176	223	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1906	SRS019587.C1053840	-	327	280	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1907	SRS021496.Baylor_scaffold_63711	+	53	100	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1908	SRS022149.C2781104	+	1	48	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1909	SRS023557.C1767695	-	247	200	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1910	SRS042910.C5602692	-	383	336	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1911	SRS044373.C2907430	-	742	695	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1912	SRS048791.C3091469	-	313	266	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1913	SRS051244.LANL_scaffold_30757	+	464	511	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1914	SRS055450.LANL_scaffold_72003	-	364	317	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1915	SRS057692.LANL_scaffold_6218	+	21	68	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1916	SRS058336.C2042484	-	153	106	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1917	SRS064423.LANL_scaffold_57424	+	419	466	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1918	SRS043422.C2694041	-	1486	1439	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1919	SRS014473.C1126565	+	640	687	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1920	SRS019125.C625732	+	7434	7481	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1921	SRS064329.C2689539	-	427	380	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1922	SRS012279.Baylor_scaffold_66478	+	7846	7893	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1923	SRS022077.Baylor_scaffold_42750	+	9400	9447	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1924	SRS013947.C1568635	+	15	62	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1925	SRS014573.WUGC_scaffold_22664	+	73	120	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1926	SRS015158.WUGC_scaffold_53335	+	495	542	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1927	SRS015644.WUGC_scaffold_47575	+	224	271	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1928	SRS015797.C2629919	+	42	89	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1929	SRS016002.C2634626	+	834	881	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1930	SRS016086.C2525590	-	620	573	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1931	SRS016225.C3015844	-	61	14	RNA →
env-1932	SRS024081.LANL_scaffold_72737	+	2277	2324	RNA →
env-1933	SRS042131.C2167664	+	340	387	RNA →
env-1934	SRS049147.C4008101	+	291	338	RNA →
env-1935	SRS018145.Baylor_scaffold_19145	-	1405	1358	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1936	SRS019027.C1962878	-	130	83	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-1937	SRS019122.C5834060	+	331	378	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1938	SRS019591.WUGC_scaffold_17646	-	61	14	RNA →
env-1939	SRS022083.C1886151	-	305	258	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1940	SRS022530.LANL_scaffold_2248	+	50661	50708	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1941	SRS024277.LANL_scaffold_38800	-	331	284	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1942	SRS042984.LANL_scaffold_420	+	1488	1535	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1943	SRS047824.C2273016	-	257	210	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1944	SRS049389.WUGC_scaffold_29036	+	784	831	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1945	SRS057539.LANL_scaffold_61878	-	651	604	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1946	SRS057791.C3560696	+	282	329	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1947	SRS063288.LANL_scaffold_13079	+	772	819	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1948	SRS065278.C2443864	+	63	110	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1949	Palatine.Tonsils.LANL.C6176060	-	63	16	RNA →
env-1950	SRS045313.C1321695	+	55	102	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1951	SRS018443.C3710842	+	364	411	RNA →
env-1952	SRS023538.Baylor_scaffold_34561	-	542	495	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1953	SRS051378.LANL_scaffold_19919	+	108	155	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1954	SRS055401.LANL_scaffold_31063	+	824	871	RNA →

env-1955	SRS015985.WUGC_scaffold_29053	-	1071	1024	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1956	SRS015989.WUGC_scaffold_321	-	1263	1216	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1957	SRS011140.C5162271	-	1086	1039	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1958	SRS011343.Baylor_scaffold_58822	-	579	532	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1959	SRS013950.C2176163	-	1345	1298	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1960	SRS019129.WUGC_scaffold_25059	+	248	295	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1961	SRS014894.WUGC_scaffold_48888	+	400	447	RNA →
env-1962	SRS015278.WUGC_scaffold_56393	+	212	259	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1963	SRS015470.WUGC_scaffold_46669	+	449	496	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1964	SRS016043.C2059938	-	61	14	RNA →
env-1965	SRS016746.Baylor_scaffold_53508	+	20	67	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1966	SRS017439.C3749384	+	21	68	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1967	SRS017691.C5063285	+	292	339	RNA →
env-1968	SRS018394.Baylor_scaffold_1898	-	472	425	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1969	SRS019128.WUGC_scaffold_19415	+	88	135	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1970	SRS019906.WUGC_scaffold_36213	-	53	6	RNA →
env-1971	SRS022536.LANL_scaffold_43917	-	900	853	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1972	SRS023595.C6958305	+	381	428	RNA →
env-1973	SRS024021.Baylor_scaffold_13409	-	8309	8262	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1974	SRS024447.LANL_scaffold_52352	-	305	258	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1975	SRS047113.LANL_scaffold_72955	+	244	291	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1976	SRS047634.LANL_scaffold_135861	-	561	514	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1977	SRS053584.LANL_scaffold_40362	-	1914	1867	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1978	SRS058808.LANL_scaffold_50592	-	215	168	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1979	SRS063932.LANL_scaffold_80836	+	169	216	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1980	SRS023930.C2188236	-	1153	1106	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1981	SRS011126.Baylor_scaffold_69832	-	338	291	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1982	SRS011152.Baylor_scaffold_54314	-	364	317	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1983	SRS013252.C3586002	-	55	8	RNA →
env-1984	SRS014578.WUGC_scaffold_33113	-	891	938	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1985	SRS015215.C2492460	-	441	394	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1986	SRS015440.C2591831	+	803	850	RNA →
env-1987	SRS015574.WUGC_scaffold_74608	+	333	380	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1988	SRS016331.C3952241	+	270	317	RNA →
env-1989	SRS052876.LANL_scaffold_31436	+	425	472	RNA →
env-1990	SRS017025.Baylor_scaffold_2897	-	844	797	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1991	SRS017511.C3486220	+	49	96	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1992	SRS017814.C2648955	-	305	258	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1993	SRS018971.C748940	-	283	236	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1994	SRS019387.C1725966	-	63	16	RNA →
env-1995	SRS019980.Baylor_scaffold_58741	+	1292	1339	RNA →
env-1996	SRS022725.LANL_scaffold_113781	+	1278	1325	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1997	SRS023964.Baylor_scaffold_44464	-	2165	2118	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1998	SRS024381.LANL_scaffold_36143	-	1503	1456	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-1999	SRS043755.WUGC_scaffold_39570	+	517	564	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2000	SRS047265.C1087503	-	931	884	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2001	SRS051930.C3123168	+	372	419	RNA →
env-2002	SRS054430.LANL_scaffold_24266	+	1510	1557	RNA →
env-2003	SRS063603.LANL_scaffold_97549	-	336	289	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2004	SRS063999.LANL_scaffold_80667	-	1141	1094	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2005	SRS016541.Baylor_scaffold_17430	+	71	118	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Ran-4-1	NC_017569.1	-	1632510	1632464	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →

Ran-1-1	NZ_CP007504.1	+	677153	677199	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Ran-1-2	NZ_CP007503.1	+	665064	665110	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Ran-2-1	NC_014738.1	+	675647	675693	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Ran-6-1	NZ_AENH01000022.1	+	24212	24258	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Ran-5-1	NZ_KB206037.1	-	211263	211217	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Ran-3-1	NC_020125.1	-	1053939	1053893	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Ran-2-2	NC_017045.1	+	837166	837212	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Ran-7-1	NZ_CP007204.1	+	663670	663716	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cca-2-1	NZ_CDOE01000080.1	-	107055	107000	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cca-2-2	NZ_CDOK01000138.1	+	7933	7987	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cca-2-3	NZ_CDOJ01000102.1	+	7875	7929	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cca-3-1	NC_015846.1	-	2206651	2206597	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2006	JGI12420J12819_1001506	-	9008	8962	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2007	TFO_HY_Contig_14630	-	7035	6950	RNA → rpsO (PRK05626) RpsO (COG0184) →
Mru-1-1	NC_015945.1	-	2244219	2244134	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2008	JGI11876J14442_10002026	+	6244	6306	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2009	ElkS_mat_CD2A_1000757	-	3779	3717	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2010	CEOE01009065.1	+	2223	2285	RNA →
env-2011	CEOE01041545.1	+	1214	1276	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2012	CEQQ01164659.1	-	411	349	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2013	CESC01055335.1	+	492	554	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2014	CEVF01145327.1	+	1277	1339	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2015	CEOS01127385.1	+	891	953	RNA →
env-2016	CEQH01250475.1	-	233	171	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2017	CETR01116473.1	-	448	386	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2018	CEQG01236235.1	-	299	237	RNA → rpsO (PRK05626) RpsO (COG0184) →
Msp-2-1	NZ_JQNJ01000001.1	-	2554372	2554309	RNA → rpsO (PRK05626) RpsO (COG0184) →
Cba-2-1	NZ_CP009976.1	-	2003323	2003261	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cba-3-1	NZ_ATLG01000025.1	+	148886	148948	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-11-1	NZ_JQCT01000001.1	+	36796	36858	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cba-4-1	NZ_CP009887.1	-	1991741	1991679	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Cba-1-1	NZ_ATLH01000029.1	+	35153	35215	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2019	P_1C_Sed_3_UnCty_1112983	+	133	197	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2020	SA_S1_NOR08_45m_c10098966	-	656	592	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Csp-12-1	NZ_JUHB01000001.1	-	3425850	3425786	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Zul-1-1	NZ_JQMD01000002.1	+	2791513	2791577	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2021	CEQH01267320.1	-	701	637	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2022	CEQR01110231.1	+	2717	2781	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2023	CEQT01008943.1	-	946	882	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2024	CERC01066844.1	-	30660	30596	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2025	CERD01127367.1	+	35670	35734	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2026	CERE01165140.1	-	692	628	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2027	CERX01241151.1	-	248	184	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2028	CENJ01132294.1	-	814	750	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2029	JGI24723J26617_10000090	-	7488	7425	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Ace-1-1	NZ_AUCB01000005.1	+	34830	34893	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Ala-2-1	NZ_KE384290.1	-	34915	34852	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2030	KGLS1_ANT01_95m_c10011027	+	4052	4115	RNA → ←-hypo
env-2031	KGLS2_ANT06_2345m_c1000769	-	806	743	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2032	SA_S1_NOR05_45m_c10101907	-	644	581	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2033	SA_S2_NOR15_50m_c10610413	+	126	189	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2034	KGLS2_ANT05_2345m_c1051480	+	342	405	RNA → rpsO (PRK05626) RpsO (COG0184) →

env-2035	KGLS1_ANT02.95m.c10160552	+	8	71	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2036	JGI24025J20009.10098606	+	246	309	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2037	KGLS1_ANT01.95m.c10032764	+	1919	1982	RNA → rpsO (PRK05626) →
env-2038	KGLS1_ANT01.95m.c10238661	-	453	390	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2039	TDF_OR_ARG04.113m.c1031286	+	374	437	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2040	TDF_MC_ARG01.113m.c1031732	-	233	170	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2041	SA.S1_NOR08.45m.c10338978	+	208	271	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2042	TDF_MC_ARG02.113m.c1027467	+	202	265	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2043	KGLS1_ANT03.95m.c1036695	+	376	439	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2044	KGLS1_ANT02.95m.c10041159	+	904	967	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2045	JGI24023J19991.10153635	+	471	534	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2046	KGLS1_ANT01.95m.c10009658	-	886	823	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2047	KGLS2_ANT04.2345m.c1021074	+	852	915	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2048	KGLS1_ANT02.95m.c10001832	+	7430	7493	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2049	P_2C_Liq.1.UnCty_1014332	-	1481	1417	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2050	PML_READ.00802233	+	187	251	RNA →
env-2051	DelMOSum2011.c10009803	-	282	218	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2052	DelMOWin2010.c10595920	+	80	144	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2053	P_2C_Liq.2.UnCty_1013023	-	1456	1392	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2054	PML_READ.00935082	+	13	77	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2055	DelMOSum2010.c10010410	+	322	386	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2056	JGI20152J14361.10001126	-	5003	4939	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2057	JGI20151J14362.10008756	+	270	334	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2058	JGI20156J14371.10000639	-	17377	17313	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2059	JGI20154J14316.10003245	+	8271	8335	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2060	JGI20160J14292.10001354	+	13475	13539	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2061	JGI20153J14295.10000494	+	27409	27473	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2062	JGI20153J14318.10000494	+	27409	27473	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2063	JGI20157J14317.10000832	+	24813	24877	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2064	JGI20159J14440.10001145	-	5009	4945	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2065	JGI20155J14468.10001234	+	14134	14198	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2066	JGI20158J14315.10000172	+	28789	28853	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2067	F10SI0310a.Sequence0000028922	-	721	657	RNA → rpsO (PRK05626)RpsO (COG0184) →
Ead-1-1	NZ_KB907552.1	+	40646	40709	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2068	TDF_MC_ARG02.113m.c1042706	+	63	126	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2069	TDF_OR_ARG04.113m.c1023153	-	698	635	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2070	TDF_MC_ARG01.113m.c1008162	-	795	732	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2071	JGI24024J18818.10072705	+	731	794	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2072	TDF_OR_ARG05.123m.c1037339	-	340	277	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2073	JGI24723J26617.10002068	-	2830	2767	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2074	JGI24723J26617.10248799	+	233	296	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2075	CENR01000826.1	-	4573	4510	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
Aal-1-1	NZ_JPOO01000001.1	-	1038671	1038608	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2076	JGI24723J26617.10486333	-	145	82	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2077	JGI24724J26744.10000006	-	23136	23073	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2078	JGI24724J26744.10987649	+	71	135	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2079	JGI24723J26617.10013201	+	2526	2590	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
Fba-6-1	NC.014472.1	+	156641	156705	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2080	JGI24723J26617.10539426	-	214	150	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →
env-2081	JGI25321J50212.10002132	+	13149	13213	RNA → rpsO (PRK05626)RpsO (COG0184) →
env-2082	JGI25321J39296.1282722	+	90	154	RNA →
env-2083	KGLS1_ANT01.95m.c10067499	+	739	804	RNA → rpsO (PRK05626)Ribosomal_S15 (pfam00312) →

env-2084	KGLS2_ANT06.2345m.c1000581	+	4905	4970	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Msp-1-1	NZ_JHZW01000003.1	+	2014167	2014232	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2085	LAZR01000507.1	+	2889	2954	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2086	JGI11876J14442.10355929	-	340	276	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2087	JGI11876J14442.10036760	-	2240	2176	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2088	ElkS_mat_CD6A.1068972	-	237	173	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Mth-1-1	NZ_LDAS01000001.1	-	4009227	4009163	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2089	CEVJ01146598.1	-	214	150	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2090	CETA01166376.1	+	440	504	RNA →
env-2091	CETS01181212.1	+	283	347	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2092	CETB01163303.1	-	1560	1496	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2093	CETR01268141.1	-	1727	1663	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2094	CEV101056776.1	-	475	411	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2095	CEVK01107237.1	-	796	732	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2096	CEVM01115743.1	+	2313	2377	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2097	CEVO01246946.1	-	1295	1231	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2098	CEVQ01106901.1	+	43110	43174	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Rbi-1-1	NC_013222.1	+	3406822	3406886	RNA → rpsO (PRK05626) RpsO (COG0184) →
Mfo-1-1	NZ_JQLH01000001.1	+	3616475	3616539	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2099	SRS018149.C2886978	-	75	30	RNA →
env-2100	3300000558.10272742	+	581	647	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2101	3300001605.10046245	+	2444	2510	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Fse-1-1	NZ_JNCA01000025.1	-	40213	40146	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Fda-1-1	NZ_AUDK01000001.1	+	111173	111240	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2102	KGLS1_ANT02.95m.c10000014	-	20719	20655	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2103	CEQG01122965.1	+	138	206	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2104	CEQP01291574.1	-	688	620	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2105	PBR_1135713	-	3768	3704	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Fso-1-1	NZ_AUGO01000002.1	-	155840	155776	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2106	PBDCA2_FISUTAU01D46T8	+	233	297	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2107	SwRhRL2b.contig_129529	+	1053	1118	RNA →
env-2108	SwRhRL2b.contig_2550456	+	642	706	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2109	JGI26527J51213.1149640	+	13	79	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2110	JGI26529J51215.1006318	+	1509	1575	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
Aag-1-1	NZ_JH621247.1	-	228487	228423	RNA → rpsO (PRK05626) RpsO (COG0184) →
env-2111	JGI24724J26744.10001654	+	4696	4763	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2112	JGI24723J26617.10011881	-	2756	2690	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2113	CEPR01003942.1	+	62986	63052	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2114	CERJ01037600.1	-	198	132	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2115	CETR01183773.1	+	156	222	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2116	SI34jun09.100m.1197366	+	207	141	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2117	CERM01080683.1	+	40389	40455	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2118	DelMOSum2010.c10000067	+	83929	83995	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2119	SI34jun09.10m.1052143	-	402	336	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2120	JGI20154J14316.10000666	-	10629	10563	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2121	DelMOSum2011.c10001660	+	6855	6921	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2122	A09P04.1300_Sequence0000000013	+	12503	12569	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2123	A09P04.1300_Sequence0000004592	+	1617	1683	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2124	CESJ01250408.1	+	408	474	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2125	SI39nov09.120m.c1053170	+	111	177	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →
env-2126	CEWR01159061.1	-	91	25	RNA →
env-2127	CESM01110142.1	+	653	720	RNA → rpsO (PRK05626) Ribosomal_S15 (pfam00312) →

env-2128	SA_S1_NOR08_45m.c10035062	+	255	321	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2129	SA_S1_NOR08_45m.c10000452	-	838	771	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2130	SA_S2_NOR15_50m.c10000459	-	223	156	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2131	SA_S1_NOR05_45m.c10453048	+	105	172	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2132	2236876010_0472988	-	323	256	RNA	→		
env-2133	JGI20158J14315_10190251	+	302	369	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2134	SI34jun09_10m_1034686	-	415	348	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2135	JGI20155J14468_10136840	-	350	283	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2136	CESF01030834.1	-	322	255	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2137	DelMOWin2010.c10000940	+	13266	13333	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2138	2236876010_0612317	-	99	31	RNA	→		
env-2139	2236876009_226267	+	99	166	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2140	JGI24723J26617_10002855	+	10915	10980	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2141	KVRMV2_105383168	+	103	169	RNA	→		
env-2142	SA_S1_NOR08_45m.c10517261	-	204	138	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2143	JGI24724J26744_10022380	-	2421	2353	RNA	→	rpsO (PRK05626)RpsO (COG0184)	→
env-2144	KVRMV2_100000644	-	1868	1802	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2145	3300001605_10000882	+	723	789	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2146	3300001605_10008345	-	347	281	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2147	3300001605_10233542	+	724	790	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2148	2210106066	-	148	89	RNA	→	rpsO (PRK05626)RpsO (COG0184)	→
env-2149	2157111858	+	47	106	RNA	→		
env-2150	JGI25908J49247_10464678	-	201	146	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2151	JGI25911J50253_10473464	+	71	126	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
env-2152	M3P_1084921	-	420	362	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
Fps-4-1	NC_009613.3	+	1899222	1899287	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
Fps-1-4	NZ_CP008878.1	+	2162665	2162730	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
Fps-1-5	NZ_CP008883.1	+	2156137	2156202	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
Fps-1-6	NZ_CP008881.1	+	2153198	2153263	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
Fps-1-7	NZ_CP007627.1	-	849155	849090	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
Fps-2-1	NZ_CP007206.1	-	797073	797008	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
Fps-3-1	NZ_CP007207.1	-	1689453	1689388	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
Fps-1-8	NZ_CP008902.1	+	2199599	2199664	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
Fps-1-9	NZ_CP010275.1	+	2296737	2296802	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→
Fps-1-10	NZ_CP010277.1	+	2258520	2258585	RNA	→	rpsO (PRK05626)Ribosomal_S15 (pfam00312)	→

22.4 Conserved domains

Conserved domains found in protein-coding genes listed in Section 22.3 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one S15-Flavobacteria RNA are assigned a color, while others are shown in gray. The symbols ‘d’ and ‘u’ (if any) to the left of the colored domain name indicate whether the domain occurs upstream or downstream of the RNA motif. Domains marked with lower-case ‘d’ occur (at least once) present downstream of some S15-Flavobacteria

RNA in the opposite orientation. Domains marked with capital ‘D’ occur downstream and in the same orientation (i.e., a potential *cis*-regulatory arrangement). Domains marked with a ‘u’ occur upstream of the RNA in either orientation. If the ‘d’/‘u’ symbols are missing, then the domain is downstream and in the same strand. (This mode is used for motifs predicted as *cis*-regulatory.) The number in parentheses after the colored domain name is the number of occurrences in Section 22.3.

- bSCRAP106** (26) Self-Cleaving Ribozyme Associated Protein number 106 (gi=2031276512 by jackhmmer)
- bSCRAP40** (26) Self-Cleaving Ribozyme Associated Protein number 40 (gi=10605909721 by jackhmmer)
- cd00353** (2) Ribosomal protein S15 (prokaryotic)_S13 (eukaryotic) binds the central domain of 16S rRNA and is required for assembly of the small ribosomal subunit and for intersubunit association, thus representing a key element in the assembly of the whole ribosome.
- cd00429** (50) Ribulose-5-phosphate 3-epimerase (RPE).
- cd11363** (45) Polyribonucleotide nucleotidyltransferase, repeat 1.
- COG0184** (344) Ribosomal protein S15P/S13E [Translation, ribosomal structure and biogenesis]
- COG0405** (1) Gamma-glutamyltranspeptidase [Amino acid transport and metabolism]
- COG0568** (54) DNA-directed RNA polymerase, sigma subunit (sigma70/sigma32) [Transcription]
- COG0810** (1) Periplasmic protein TonB, links inner and outer membranes [Cell wall/membrane/envelope biogenesis]
- COG1185** (118) Polyribonucleotide nucleotidyltransferase (polynucleotide phosphorylase) [Translation, ribosomal structure and biogenesis]
- COG1770** (1) Protease II [Amino acid transport and metabolism]
- COG2377** (2) 1,6-Anhydro-N-acetylmuramate kinase [Cell wall/membrane/envelope biogenesis]
- pfam00140** (5) Sigma-70 factor, region 1.
- pfam00312** (1729) Ribosomal protein S15.
- pfam01138** (150) 3' exoribonuclease family, domain 1.
- pfam03702** (14) Anhydro-N-acetylmuramic acid kinase.
- pfam03725** (39) 3' exoribonuclease family, domain 2.
- pfam03726** (4) Polyribonucleotide nucleotidyltransferase, RNA binding domain.
- pfam04542** (3) Sigma-70 region 2.
- pfam06210** (18) Protein of unknown function (DUF1003).
- PLN02198** (1) glutathione gamma-glutamylcysteinytransferase
- PRK05581** (50) ribulose-phosphate 3-epimerase; Validated
- PRK05626** (2112) 30S ribosomal protein S15; Reviewed
- PRK09210** (2) RNA polymerase sigma factor RpoD; Validated
- PRK09585** (16) anhydro-N-acetylmuramic acid kinase; Reviewed
- PRK10115** (1) protease 2; Provisional
- PRK11824** (313) polynucleotide phosphorylase/polyadenylase; Provisional
- smart00316** (1) Ribosomal protein S1-like RNA-binding domain.
- smart00322** (1) K homology RNA-binding domain.
- TIGR01352** (1) TonB family C-terminal domain. [Transport and binding proteins, Cations and iron carrying compounds]
- TIGR02169** (18) chromosome segregation protein SMC, primarily archaeal type. [Cellular processes, Cell division, DNA metabolism, Chromosome-associated proteins]
- TIGR02937** (57) RNA polymerase sigma factor, sigma-70 family.

22.5 Multiple-sequence alignment

Each S15-Flavobacteria RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 22.1. (Superscript numbers refer to annotations listed in Section 22.2) The alignment may include sequences containing the RNA motif, as well as flanking sequence. The S15-Flavobacteria RNA itself is denoted by the line underneath marked 5' and 3' on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in *gray letters*. Stems of predicted rho-independent transcription terminators, if any, are shaded **yellow**. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNIE software.) Nucleotides predicted to function (as DNA) as transcription-factor binding sites, if any, are shaded in **green**. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded **green**. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-Crick or G-U pairs. Oth-

erwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method. “1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, **red nucleotides**: nucleotide identity conserved more than 97% of the time, black nucleotides: 90%, **gray nucleotides**: 75%, red circle (◉): nucleotide is present 97% of the time, black circle (◐): 90%, gray circle (◑): 75%, white circle (◒): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

Duplicate sequences: the following putative homologs are not shown in the alignment because their sequences are identical to a homolog already shown: Aal-1-1, Cba-1-1, Cba-3-1, Cca-2-3, Cca-3-1, Ccy-1-2, Ccy-2-1, Cin-2-1, Coc-4-1, Cor-1-2, Csp-4-1, Ean-1-1, Ean-1-2, Ean-1-4, Ean-10-1, Ean-11-1, Ean-12-1, Ean-2-1, Ean-4-1, Ean-5-1, Ean-6-1, Ean-7-1, Ean-8-1, Ean-9-1, Eme-1-1, Eme-2-2, Fca-1-2, Fen-1-2, Fps-1-10, Fps-1-2, Fps-1-3, Fps-1-4, Fps-1-5, Fps-1-6, Fps-1-7, Fps-1-8, Fps-1-9, Fps-2-1, Fps-3-1, Fri-2-1, Fsp-14-1, Fsu-1-2, Fsu-3-2, Jpa-1-2, Jpa-1-3, Lbl-1-1, M[o-1-1, Mod-2-1, Mod-5-1, Msp-3-1, Orh-2-1, Orh-3-1, Psp-1-1, Ran-1-1, Ran-1-2, Ran-2-2, Ran-3-1, Ran-5-1, Ran-6-1, Ran-7-1, Zpr-1-1, env-10, env-1000, env-1014, env-1020, env-1031, env-104, env-1043, env-105, env-1050, env-1052, env-1054,

env-409 AAUUUUCAAAA...
 env-410 UUUUUCAAAA...
 env-411 AAUUUUCAAAA...
 env-412 AAUUUUCAAAA...
 env-413 AAUUUUCAAAA...
 env-414 AAUUUUCAAAA...
 env-415 AAUUUUCAAAA...
 env-416 AAUUUUCAAAA...
 env-417 AAUUUUCAAAA...
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 Fbe-1-1 AAUUUUCAAAA...
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 Ksp-1-1 AAUUUUCAAAA...
 Dsp-2-1 AAUUUUCAAAA...
 Dsp-1-1 AAUUUUCAAAA...
 Ddo-1-1 AAUUUUCAAAA...
 Iha-1-1 AAUUUUCAAAA...
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 env-491 AAUUUUCAAAA...

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env-677 AUUUUCAAGAAACCGGAGGUUCUGAUCGAAACACGUGGUCGACAGAAGGCAAAAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-678 AUUUUCAAGAAACCGGAGGUUCUGAUCGAAACACGUGGUCGACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-679 AUUUUCAAGAAACCGGAGGUUCGACAGAAUACGGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-680 AUUUUCAAGAAACCGGAGGUUCGACAGAAUACGGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-681 AUUUUCAAGAAACCGGAGGUUCGACAGAAACACCGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-682 AUUUUCAAGAAACCGGAGGUUCGACAGAAACACCGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-683 AUUUUCAAGAAACCGGAGGUUCGACAGAAACACCGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-684 AUUUUCAAGAAACCGGAGGUUCGACAGAAACACCGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-685 AUUUUCAAGAAACCGGAGGUUCGACAGAAACACCGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-686 AUUUUCAAGAAACCGGAGGUUCGACAGAAACACCGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-687 AUUUUCAAGAAACCGGAGG
env-688 AUUUUCAAGAAACCGGAGGUUCGACAGAAACACCGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-689 AUUUUCAAGAAACCGGAGGUUCGACAGAAACACCGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-690 AUUUUCAAGAAACCGGAGGUUCGACAGAAACACCGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-691 AUUUUCAAGAAACCGGAGGUUCGACAGAAACACCGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-692 AUUUUCAAGAAACCGGAGGUUCGACAGAAACACCGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-693 AUUUUCAAGAAACCGGAGGUUCGACAGAAACACCGGUCUACAGAAGGCGAUAUUGCUUUUUAUACCUACGAAUACAGUCACCUAACGAAUACUUGAAAAAGAAUAGAUUUUGGUACAAAGAGCACUUCUUAUGGUAUUUUUAGGAAUUAUUGGACUACCUA
env-694 AUCUUUAAAAAUCAGUUAUUCAGAAAAACACUGGAUACACUGAAGGCAAAUUGGCUUUUUUACCCAGUUAUUCACACUUAUCAGAAACACCUUAAAACAAAACAGAAAGAUUUCACUACUGAAGGCUUACUAGUGGAAAGCGAAAGUCUUUCUGAUAUUUUA
env-698 AUCUUUAAAAAUCAGUUAUUCAGAAAAACACUGGAUACACUGAAGGCAAAUUGGCUUUUUUACCCAGUUAUUCACACUUAUCAGAAACACCUUAAAACAAAACAGAAAGAUUUCACUACUGAAGGCUUACUAGUGGAAAGCGAAAGUCUUUCUGAUAUUUUA
env-699 AUCUUUAAAAAUCAGUUAUUCAGAAAAACACUGGAUACACUGAAGGCAAAUUGGCUUUUUUACCCAGUUAUUCACACUUAUCAGAAACACCUUAAAACAAAACAGAAAGAUUUCACUACUGAAGGCUUACUAGUGGAAAGCGAAAGUCUUUCUGAUAUUUUA
env-700 AUCUUUAAAAAUCAGUUAUUCAGAAAAACACUGGAUACACUGAAGGCAAAUUGGCUUUUUUACCCAGUUAUUCACACUUAUCAGAAACACCUUAAAACAAAACAGAAAGAUUUCACUACUGAAGGCUUACUAGUGGAAAGCGAAAGUCUUUCUGAUAUUUUA
env-701 AUCUUUAAAAAUCAGUUAUUCAGAAAAACACUGGAUACACUGAAGGCAAAUUGGCUUUUUUACCCAGUUAUUCACACUUAUCAGAAACACCUUAAAACAAAACAGAAAGAUUUCACUACUGAAGGCUUACUAGUGGAAAGCGAAAGUCUUUCUGAUAUUUUA
env-702 AUCUUUAAAAAUCAGUUAUUCAGAAAAACACUGGAUACACUGAAGGCAAAUUGGCUUUUUUACCCAGUUAUUCACACUUAUCAGAAACACCUUAAAACAAAACAGAAAGAUUUCACUACUGAAGGCUUACUAGUGGAAAGCGAAAGUCUUUCUGAUAUUUUA
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A U U U Y R . R A R C . A G G . R R . . . R . R . . R A Y A C . G G . . G . C . R . G A . G . C . A A . U . Y . G C . Y U R U Y A C . Y . Y . G . A U Y R A Y C A Y Y U R . C . R A . C A Y Y U R A A A R . A A Y C . I A R G A U . Y A Y A . G A R . C . U C . Y U R G U . . . R Y U R G U . G G . A A R . G . R G Y U . Y U . G A Y U A Y Y U

Each S16-Flavobacteria RNA (indicated by “RNA→”) is listed. For each hit, the downstream genes predicted to reside in a regulated operon are listed. If the nearest downstream gene is encoding in the opposite strand (and therefore presumed to not be a part of a regulated operon), then that gene is still depicted. Some environmental sequences and some RefSeq entries lack gene annotations, and so no genes are available for such sequences. The direction of each gene is indicated with an arrow (→), and each predicted conserved domain in the gene is named. Conserved domains associated with more than one S16-Flavobacteria RNA are assigned a color; other domains are gray. Information about these con-

served domains is given in Section 23.3. The accession of the sequence containing each S16-Flavobacteria RNA is given in the column named “Seq. accession”. Accessions beginning with “NC_”, “NS_”, “NW_” or “NZ_” are contained in RefSeq. Other accession refer to environmental samples. Nucleotide coordinates are given for the 5′ and 3′ boundaries of each S16-Flavobacteria RNA. If the 5′ coordinate is greater than the 3′ coordinate, the RNA is present on the reverse-complement strand of the containing genomic DNA sequence. Each hit is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 23.1.

abbrev.	Seq. accession	5′ at	3′ at	genes
env-1	CESM01053608.1	-	202	170 RNA→ rpsP (PRK14521)Ribosomal_S16 (pfam00886)→
Psp-1-1	NZ_JHZ01000001.1	-	457084	457051 RNA→ RpsP (COG0228)rpsP (PRK00040)→ rimM (PRK00122)PRC (pfam05239)→ hypo→ hypo→ hypo→
env-2	CESM01219967.1	+	5701	5735 RNA→ RpsP (COG0228)S16 (TIGR00002)→
env-3	JGI20154J14316.10001333	-	21676	21642 RNA→ RpsP (COG0228)rpsP (PRK14521)→ RimM (COG0806)rimM (PRK00122)→
Cca-2-1	NZ_CDOI01000172.1	+	530	565 RNA→ RpsP (COG0228)rpsP (PRK14521)→ RimM (COG0806)rimM (PRK00122)→
env-4	JCVL_SCAF_1096627433698	+	434	468 RNA→ RpsP (COG0228)rpsP (PRK14521)→
env-5	KVRMV2.103388609	-	189	154 RNA→ rpsP (PRK14521)Ribosomal_S16 (pfam00886)→
env-6	KVRMV2.102516834	-	164	134 RNA→ rpsP (PRK14521)Ribosomal_S16 (pfam00886)→
env-7	JGI25321J39296.1021846	+	360	395 RNA→ rpsP (PRK14521)Ribosomal_S16 (pfam00886)→ rimM (PRK00122)RimM (pfam01782)→
env-8	JGI12109J20283.11786692	+	191	225 RNA→ RpsP (COG0228)rpsP (PRK00040)→
env-9	KGLS1_ANT01.95m_c10031201	+	1995	2031 RNA→ RpsP (COG0228)rpsP (PRK14521)→
Mth-1-1	NZ_LDAS01000001.1	-	2478880	2478844 RNA→ RpsP (COG0228)rpsP (PRK14521)→ RimM (COG0806)rimM (PRK00122)→
env-10	TFO_HY_Contig_1945	+	10420	10454 RNA→ RpsP (COG0228)rpsP (PRK14521)→ RimM (COG0806)rimM (PRK00122)→ PRK13759 (PRK13759)GALNS_like (cd16026)→ RNA→
env-11	2236876002.175824	+	203	238 RNA→ RpsP (COG0228)rpsP (PRK14521)→
env-12	CETA01149051.1	+	1248	1282 RNA→ rpsP (PRK14521)Ribosomal_S16 (pfam00886)→ RimM (COG0806)rimM (PRK00122)→ YjhB (COG1051)PRK05379 (PRK05379)→ PrsA (COG0462)ribP_PPkin (TIGR01251)→ PRK09198 (PRK09198)PBEF_like (cd01569)→ AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649)→ PLN02526 (PLN02526)CaiA (COG1960)→
env-13	P_1C_Liq_3_UnCty_1040456	+	269	303 RNA→
env-14	CEGD01011474.1	+	251	285 RNA→ RpsP (COG0228)TolA (COG3064)rpsP (PRK14521)→ rimM (PRK00122)RimM (pfam01782)→
env-15	CEVP01343318.1	-	72	38 RNA→
env-16	TDF_OR_ARG04.113m_c1016836	-	288	254 RNA→ RpsP (COG0228)rpsP (PRK00040)→
env-17	ElkS_mat_MD6A.1002363	-	3313	3279 RNA→ RpsP (COG0228)rpsP (PRK00040)→ RimM (COG0806)rimM (PRK00122)→
env-18	JGI24723J26617.10000107	-	52649	52615 RNA→ RpsP (COG0228)rpsP (PRK14521)→
env-19	P_2C_Liq_1_UnCty_1011637	-	752	718 RNA→ rpsP (PRK00040)Ribosomal_S16 (pfam00886)→ RimM (pfam01782)→
env-20	JGI11876J14442.10621969	+	123	157 RNA→ rpsP (PRK14521)Ribosomal_S16 (pfam00886)→
env-21	P_1C_Liq_1_UnCty_1063218	-	143	109 RNA→ rpsP (PRK14521)Ribosomal_S16 (pfam00886)→
env-22	ElkS_mat_CD2A.1075435	-	84	50 RNA→ rpsP (PRK14521)→
Pto-1-1	NC_018721.1	+	2465369	2465403 RNA→ RpsP (COG0228)S16 (TIGR00002)RR_TM4-6 (pfam06459)→ RimM (COG0806)rimM (PRK00122)→
env-23	JGI1221J11331.1000253	-	14608	14574 RNA→ RpsP (COG0228)S16 (TIGR00002)→ RimM (COG0806)rimM (PRK00122)→
env-24	LV_Brine.h2.0102.1093498	+	2	36 RNA→ RpsP (COG0228)S16 (TIGR00002)→
env-25	SL_9KL_010.SED.10009602	+	426	460 RNA→ RpsP (COG0228)rpsP (PRK14521)→ RimM (COG0806)rimM (PRK00122)→
env-26	KGLS1_ANT02.95m_c10124961	+	605	639 RNA→
env-27	LV_Brine.h2.0102.1076447	+	206	240 RNA→ RpsP (COG0228)rpsP (PRK00040)→
env-28	KGLS1_ANT02.95m_c10037012	+	512	546 RNA→ RpsP (COG0228)rpsP (PRK14521)→ rimM (PRK00122)RimM (pfam01782)→
env-29	CESN01195947.1	-	1665	1631 RNA→ rpsP (PRK00040)Ribosomal_S16 (pfam00886)→ RimM (COG0806)rimM (PRK00122)→
env-30	3300001197_1087811	+	340	374 RNA→

env-31	JCVL_SCAF_1096628019256	-	205	171	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
Cca-1-1	NZ_CDOE01000079.1	+	30020	30055	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782) →
env-32	ElkS_mat_MD6A_1036189	-	417	383	RNA → RpsP (COG0228)Pth2 (COG1990)rpsP (PRK00040) →
env-33	ElkS_mat_MD6A_1084536	+	371	406	RNA →
env-34	ElkS_mat_MD6A_1142320	-	275	241	RNA → RpsP (COG0228)rpsP (PRK00040) →
env-35	CEPZ01015035.1	-	63972	63938	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782) → hypo → hypo →
Tsp-1-1	NZ_JADN01000004.1	-	154893	154859	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)PRC (pfam05239) →
Tme-1-1	NZ_LDOD01000012.1	-	29532	29498	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782) →
env-36	KVWG_1.1.1_newblercontig40966	-	246	212	RNA →
env-37	JGI20156J14371.10166570	-	50	15	RNA →
env-38	JGI20154J14316_10055217	+	1573	1608	RNA → ←hypo
env-39	JGI20153J14295_10043163	-	740	705	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-40	2236876009_178640	+	118	153	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) → RpsP (COG0228)rpsP (PRK14521) →
env-41	SA_S1_NOR05_45m_c10081110	-	672	638	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-42	CESF01293558.1	+	708	742	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-43	CERM01139738.1	-	74	40	RNA →
env-44	CEOM01051344.1	-	585	551	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-45	CESZ01096664.1	-	375	341	RNA → rpsP (PRK00040)Ribosomal_S16 (pfam00886) →
env-46	CERK01075026.1	+	203	237	RNA → RpsP (COG0228)rpsP (PRK00040) →
env-47	CEWG01225384.1	+	660	694	RNA → RpsP (COG0228)rpsP (PRK14521) → RimM (COG0806)rimM (PRK00122) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → PLN02526 (PLN02526)CaiA (COG1960) → SGNH_hydrolase_like_1 (cd01832)Lipase_GDSL_2 (pfam13472) →
env-48	CETK01073817.1	+	1419	1453	RNA → RpsP (COG0228)S16 (TIGR00002) →
env-49	CESO01307771.1	+	1268	1302	RNA → rpsP (PRK14521) →
env-50	JCVL_SCAF_1101668667308	+	755	789	RNA → rpsP (PRK00040)Ribosomal_S16 (pfam00886) →
env-51	JCVL_SCAF_1101667024969	-	694	660	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-52	CEWO01363464.1	+	1092	1126	RNA → RpsP (COG0228)S16 (TIGR00002) →
env-53	JGI24723J26617_10000040	-	77894	77860	RNA → RpsP (COG0228)rpsP (PRK14521) → RimM (COG0806)rimM (PRK00122) →
env-54	KGLS1_ANT01.95m_c10031519	+	710	744	RNA → RpsP (COG0228)rpsP (PRK14521) → RimM (COG0806)rimM (PRK00122) →
env-55	KGLS2_ANT06_2345m_c1013054	-	98	64	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-56	NCBI_READ_1112493730138	+	626	660	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-57	CETX01019456.1	-	113	79	RNA →
env-58	CEOS01080067.1	-	1787	1753	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782)PRC (pfam05239) →
env-59	CEVA01364946.1	+	106	140	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-60	JGI1221J11331_1019162	+	230	264	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) → rimM (PRK00122)RimM (pfam01782)PRC (pfam05239) →
Sxi-1-1	NZ_AUIG01000033.1	-	1535	1501	RNA → rpsP (PRK00040)Ribosomal_S16 (pfam00886) → rimM (PRK00122)RimM (pfam01782)PRC (pfam05239) → hypo → hypo →
env-61	CENM01034188.1	-	902	868	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) → rimM (PRK00122)RimM (pfam01782) →
env-62	CEOS01020083.1	-	32981	32947	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → PLN02526 (PLN02526)CaiA (COG1960) →
env-63	JGI20156J14371_10003640	+	2978	3012	RNA → RpsP (COG0228)rpsP (PRK00040) → RimM (COG0806)rimM (PRK00122) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) →
env-64	DelMOSum2010_c10016191	+	3980	4015	RNA → RpsP (COG0228)rpsP (PRK00040) →
env-65	KVRMV2_100000226	+	6455	6489	RNA → RpsP (COG0228)rpsP (PRK00040) → RimM (COG0806)rimM (PRK00122) →
env-66	JGI12037J13215_1008219	+	266	300	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-67	CGUL_GFCP3IQ02IOEQO	-	70	36	RNA →
env-68	JGI20160J14292_10003172	-	10084	10050	RNA → RpsP (COG0228)rpsP (PRK14521) → RimM (COG0806)rimM (PRK00122) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → PLN02526 (PLN02526)CaiA (COG1960) → SGNH_hydrolase_like_1 (cd01832)Lipase_GDSL_2 (pfam13472) →
env-69	2236876010_0096165	-	74	40	RNA → hypo →
env-70	CETB01226394.1	+	29	63	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-71	CENY01353123.1	+	2985	3019	RNA → rpsP (PRK00040)Ribosomal_S16 (pfam00886) →
env-72	CEOQ01279817.1	-	551	517	RNA → rpsP (PRK00040)Ribosomal_S16 (pfam00886) →

env-73	CEUC01055477.1	+	3449	3483	RNA → RpsP (COG0228)S16 (TIGR00002) →
env-74	CEOP01159386.1	+	4003	4037	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-75	2236876007_0680529	-	113	79	RNA →
env-76	JCVL_SCAF_1101668515375	-	1138	1104	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
Gsp-3-1	NZ_KE384218.1	-	412048	412014	RNA → RpsP (COG0228)rpsP (PRK14521) → RimM (COG0806)rimM (PRK00122) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → PLN02526 (PLN02526)CaiA (COG1960) →
Gsp-1-1	NZ_AJLT01000052.1	+	38402	38436	RNA → RpsP (COG0228)rpsP (PRK14521) → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782) → rimM (PRK00122)RimM (pfam01782) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → PLN02526 (PLN02526)CaiA (COG1960) → PLN02526 (PLN02526)CaiA (COG1960) →
env-77	KGL_S1_ANT01_95m_c10008968	-	71	37	RNA →
env-78	JGI24724J26744_10116716	+	457	491	RNA → RpsP (COG0228)rpsP (PRK00040) →
env-79	CESN01042302.1	+	640	674	RNA → ←-hypo
Lsp-1-1	NC_015638.1	-	1487340	1487306	RNA → RpsP (COG0228)rpsP (PRK14521) → RpsP (COG0228)rpsP (PRK00040) →
env-80	JGI24724J26744_10001441	+	16124	16158	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
Lsp-2-1	NZ_JYNQ01000001.1	-	2613222	2613188	RNA → RpsP (COG0228)rpsP (PRK00040) →
env-81	AYRF01036350.1	+	43	77	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-82	KGL_S2_ANT05_2345m_c1138509	+	19	53	RNA → RpsP (COG0228)S16 (TIGR00002) →
env-83	JGI24025J20009_10003996	+	740	774	RNA → RpsP (COG0228)rpsP (PRK00040) →
env-84	KGL_S1_ANT01_95m_c10219429	-	306	272	RNA → RpsP (COG0228)S16 (TIGR00002) →
Gme-1-1	NZ_KE383968.1	+	18032	18066	RNA → RpsP (COG0228)rpsP (PRK00040) →
env-85	DelMOSum2010_c10000289	+	5459	5493	RNA → RpsP (COG0228)rpsP (PRK14521) → RimM (COG0806)rimM (PRK00122) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → PLN02526 (PLN02526)CaiA (COG1960) → SGNH_hydrolase_like_1 (cd01832)Lipase_GDSL_2 (pfam13472) →
env-86	BS_KBA_SWE12_21m_c10003677	-	2677	2643	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782) →
env-87	JGI20156J14371_10011188	+	1622	1657	RNA → RpsP (COG0228)rpsP (PRK14521) → RimM (COG0806)rimM (PRK00122) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → PLN02526 (PLN02526)CaiA (COG1960) →
env-88	2236876011_215066	-	266	231	RNA → RpsP (COG0228)rpsP (PRK00040) →
env-89	SA_S1_NOR05_45m_c10049152	+	794	829	RNA → RpsP (COG0228)rpsP (PRK00040) →
Tna-1-1	NZ_JTDV01000002.1	+	21488	21524	RNA → RpsP (COG0228)rpsP (PRK00040) →
Sze-1-1	NZ_CP007202.1	+	440776	440811	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-90	KGL_S1_ANT01_95m_c10132422	-	525	489	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-91	JGI24723J26617_10166124	+	450	486	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-92	JGI24025J20009_10047375	+	382	418	RNA → RpsP (COG0228)S16 (TIGR00002) →
Ale-1-1	NZ_BBNQ01000006.1	+	160473	160508	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-93	KGL_S1_ANT01_95m_c10442974	+	162	197	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-94	CESF01207615.1	-	398	364	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-95	JCVL_SCAF_1096624993332	-	386	352	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-96	2236876009_175930	-	360	326	RNA → RpsP (COG0228)rpsP (PRK00040) → rpsP (PRK14521) →
env-97	JGI24024J18818_10507174	+	229	264	RNA → rpsP (PRK14521) →
Gsp-2-1	NZ_JQLP01000005.1	-	2435334	2435300	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782)PRC (pfam05239) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → PLN02526 (PLN02526)CaiA (COG1960) →
env-98	CEQH01183744.1	+	368	402	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-99	KVRMV2_102741663	-	269	235	RNA → RpsP (COG0228)rpsP (PRK00040) →
Wsp-1-1	NZ_AP014583.1	-	1850820	1850786	RNA → RpsP (COG0228)rpsP (PRK14521) → RimM (COG0806)rimM (PRK00122) →
env-100	KVRMV2_100400240	-	91	57	RNA →
Myu-1-1	NZ_JPFK01000005.1	-	589182	589148	RNA → RpsP (COG0228)rpsP (PRK14521) →
Kje-1-1	NZ_LBMG01000002.1	+	77869	77903	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782) → RibA (COG0807)ribA (PRK00393) →
env-101	KGL_S1_ANT01_95m_c10001015	-	6200	6166	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → PLN02526 (PLN02526)CaiA (COG1960) →

env-102	KGL_S1_ANT01.95m.c10178456	+	378	412	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-103	CERE01174386.1	-	139	105	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-104	2236876002.225765	-	176	142	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-105	KGL_S1_ANT01.95m.c10030431	+	734	768	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-106	KGL_S1_ANT01.95m.c10007706	-	3233	3199	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-107	JCVL_SCAF_1101668046809	-	546	512	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-108	SA_S1_NOR08_45m.c10162553	-	124	90	RNA → RpsP (COG0228)rpsP (PRK14521) →
Osp-1-1	NZ_JADS01000027.1	+	8919	8953	RNA → RpsP (COG0228)rpsP (PRK14521) → RimM (COG0806)rimM (PRK00122) →
env-109	SRS013252_Baylor_scaffold.30766	-	6014	5979	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) → RimM (COG0806)rimM (PRK00122) →
env-110	CESG01120888.1	-	205	171	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-111	SRS018439_Baylor_scaffold.43479	-	10552	10517	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)PRC (pfam05239) →
					Transket_pyr (smart00861)TktA2 (COG3958) → YicC (COG1561)PRK11820 (PRK11820) →
					Gmk (COG0194)gmk (PRK00300) → NMNAT (cd02165)nadD (PRK00071) →
					LMWPC (smart00226)LMWPTP (cd16343) → RecR (COG0353)recR (PRK00076) →
env-112	SRS015540_C1138365	-	527	492	RNA → RpsP (COG0228)rpsP (PRK14521) →
Csp-1-1	NZ_ABZV01000003.1	-	5407	5372	RNA → RpsP (COG0228)rpsP (PRK14521) → RpsP (COG0228)rpsP (PRK14521) →
					rimM (PRK00122)PRC (pfam05239) → rimM (PRK00122)PRC (pfam05239) →
					Transket_pyr (smart00861)TktA2 (COG3958) → Transket_pyr (smart00861)TktA2 (COG3958) →
					YicC (COG1561)PRK11820 (PRK11820) → YicC (COG1561)PRK11820 (PRK11820) →
					Gmk (COG0194)gmk (PRK00300) → Gmk (COG0194)gmk (PRK00300) → NMNAT (cd02165)nadD (PRK00071) →
					NMNAT (cd02165)nadD (PRK00071) → LMWPC (smart00226)LMWPTP (cd16343) →
					LMWPC (smart00226)LMWPTP (cd16343) → RecR (COG0353)recR (PRK00076) → hypo →
Kal-1-1	NZ_DS544873.1	+	2949885	2949919	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782) →
					AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) →
env-113	KGL_S1_ANT01.95m.c10275683	+	114	148	RNA → RpsP (COG0228)S16 (TIGR00002) →
env-114	JGI12097J13213_1000099	+	9148	9182	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782) →
					AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → PLN02526 (PLN02526)CaiA (COG1960) →
env-115	KGL_S1_ANT01.95m.c10082430	-	337	303	RNA → RpsP (COG0228)rpsP (PRK00040) →
env-116	JGI24724J26744_10019130	-	1468	1434	RNA → RpsP (COG0228)rpsP (PRK00040) → RimM (COG0806)rimM (PRK00122) →
					AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) →
env-117	CEQG01049560.1	+	282	316	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-118	BS_KBA_SWE12.21m.c10365013	-	337	303	RNA → RpsP (COG0228)rpsP (PRK00040) →
env-119	BS_KBA_SWE12.21m.c10000423	+	6152	6186	RNA → RpsP (COG0228)rpsP (PRK14521) → RimM (COG0806)rimM (PRK00122) →
					AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) →
env-120	P_1C_Sed_3_UnCty_1160372	+	82	116	RNA → rpsP (PRK14521)Ribosomal_S16 (pfam00886) →
env-121	SA_S1_NOR08_45m.c10086824	+	919	953	RNA →
env-122	KGL_S1_ANT01.95m.c10418974	+	254	288	RNA →
env-123	JCVL_SCAF_1096627435724	+	1230	1264	RNA →
env-124	CERM01151318.1	+	572	606	RNA →
env-125	2236876007_0117740	-	261	227	RNA → RpsP (COG0228)rpsP (PRK00040) →
env-126	wf3_AHAI4119_b1	-	581	547	RNA → RpsP (COG0228)rpsP (PRK14521) →
env-127	CESF01282643.1	-	99	65	RNA →
Gpo-1-1	NZ_AUHF01000007.1	+	179304	179338	RNA → RpsP (COG0228)rpsP (PRK14521) → rimM (PRK00122)RimM (pfam01782) →
env-128	CEOS01080028.1	+	2877	2911	RNA →
Jpa-1-1	NZ_BBNS01000030.1	-	35262	35227	RNA → RpsP (COG0228)rpsP (PRK14521) →
Gli-1-1	NZ_JH594606.1	-	2311466	2311432	RNA → RpsP (COG0228)rpsP (PRK14521)APG6 (pfam04111) →
					RpsP (COG0228)rpsP (PRK14521)APG6 (pfam04111) → rimM (PRK00122)RimM (pfam01782) →
					rimM (PRK00122)RimM (pfam01782) → AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) →
					AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) →
					AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) →
env-129	3300001197_1031695	-	46	12	RNA → hypo →
env-130	CEVX01047029.1	-	9602	9568	RNA → RpsP (COG0228)S16 (TIGR00002) → RimM (COG0806)rimM (PRK00122) →
					AdoMet_MTases (cd02440)Methyltransf_25 (pfam13649) → PLN02526 (PLN02526)CaiA (COG1960) →
					SGNH_hydrolase_like_1 (cd01832)Lipase_GDSL_2 (pfam13472) →

23.3 Conserved domains

Conserved domains found in protein-coding genes listed in Section 23.2 are shown below, with the first sentence in their description from the Conserved Domain Database (if any). Conserved domains associated with more than one S16-

cd01569 (1) pre-B-cell colony-enhancing factor (PBEF)-like.
cd01832 (4) Members of the SGNH-hydrolase superfamily, a diverse family of lipases and esterases.
cd02165 (3) Nicotinamide/nicotinate mononucleotide adenyltransferase.
cd02440 (23) S-adenosylmethionine-dependent methyltransferases (SAM or AdoMet-MTase), class I; AdoMet-MTases are enzymes that use S-adenosyl-L-methionine (SAM or AdoMet) as a substrate for methyltransfer, creating the product S-adenosyl-L-homocysteine (AdoHcy).
cd16026 (1) galactosamine-6-sulfatase; also known as N-acetylgalactosamine-6-sulfatase (GALNS).
cd16343 (3) Low molecular weight protein tyrosine phosphatase.
COG0194 (3) Guanylate kinase [Nucleotide transport and metabolism]
COG0228 (100) Ribosomal protein S16 [Translation, ribosomal structure and biogenesis]
COG0353 (2) Recombinational DNA repair protein RecR [Replication, recombination and repair]
COG0462 (1) Phosphoribosylpyrophosphate synthetase [Nucleotide transport and metabolism, Amino acid transport and metabolism]
COG0806 (25) Ribosomal 30S subunit maturation factor RimM, required for 16S rRNA processing [Translation, ribosomal structure and biogenesis]
COG0807 (1) GTP cyclohydrolase II [Coenzyme transport and metabolism]
COG1051 (1) ADP-ribose pyrophosphatase YjhB, NUDIX family [Nucleotide transport and metabolism]
COG1561 (3) Uncharacterized conserved protein YicC, UPF0701 family [Function unknown]
COG1960 (13) Acyl-CoA dehydrogenase related to the alkylation response protein AidB [Lipid transport and metabolism]
COG1990 (1) Peptidyl-tRNA hydrolase [Translation, ribosomal structure and biogenesis]
COG3064 (1) Membrane protein involved in colicin uptake [Cell wall/membrane/envelope biogenesis]

23.4 Multiple-sequence alignment

Each S16-Flavobacteria RNA is denoted by an abbreviation (like “Eco-1-1”) that refers to a taxonomy given in Section 23.1. The alignment may include sequences containing the RNA motif, as well as flanking sequence. The S16-Flavobacteria RNA itself is denoted by the line underneath marked 5' and 3' on either end. Nucleotides in flanking sequences (i.e., not part of the motif) are written in gray letters. Stems of predicted rho-independent transcription terminators, if any, are shaded yellow. (Note: terminator predictions have not been analyzed manually, and many are likely to be false positives. Terminator predictions are those of the RNE software.) Nucleotides predicted to function (as DNA) as transcription-

Flavobacteria RNA are assigned a color, while others are shown in gray. The number in parentheses after the colored domain name is the number of occurrences in Section 23.2.

COG3958 (3) Transketolase, C-terminal subunit [Carbohydrate transport and metabolism]
pfam00886 (35) Ribosomal protein S16.
pfam01782 (23) RimM N-terminal domain.
pfam04111 (2) Autophagy protein Apg6.
pfam05239 (9) PRC-barrel domain.
pfam06459 (1) Ryanodine Receptor TM 4-6.
pfam13472 (4) GDSL-like Lipase/Acylhydrolase family.
pfam13649 (23) Methyltransferase domain.
PLN02526 (13) acyl-coenzyme A oxidase
PRK00040 (32) 30S ribosomal protein S16; Reviewed
PRK00071 (3) nicotinic acid mononucleotide adenyltransferase; Provisional
PRK00076 (2) recombination protein RecR; Reviewed
PRK00122 (52) 16S rRNA-processing protein RimM; Provisional
PRK00300 (3) guanylate kinase; Provisional
PRK00393 (1) GTP cyclohydrolase II; Reviewed
PRK05379 (1) bifunctional nicotinamide mononucleotide adenyltransferase/ADP-ribose pyrophosphatase; Provisional
PRK09198 (1) putative nicotinate phosphoribosyltransferase; Provisional
PRK11820 (3) hypothetical protein; Provisional
PRK13759 (1) arylsulfatase; Provisional
PRK14521 (95) 30S ribosomal protein S16; Provisional
smart00226 (3) Low molecular weight phosphatase family.
smart00861 (3) Transketolase, pyrimidine binding domain.
TIGR00002 (12) ribosomal protein S16. [Protein synthesis, Ribosomal proteins: synthesis and modification]
TIGR01251 (1) ribose-phosphate pyrophosphokinase. [Purines, pyrimidines, nucleosides, and nucleotides, Purine ribonucleotide biosynthesis]

factor binding sites, if any, are shaded in green. (But note: these predictions are manually annotated, so they might be under-predicted.) Annotated start codons, if any, are shaded green. (Note: start codons are frequently misannotated, especially in environmental samples.) Nucleotides proposed to basepair as part of the consensus structure are shaded in color when they comprise Watson-Crick or G-U pairs. Otherwise they are shaded gray. Conserved stems are also indicated at the bottom of the alignment by angle brackets, where matching < and > denote base-paired columns. Below these angle brackets, the symbol “2” denotes base pairs exhibiting covariation according to the statistically well-founded R-scape method.

“1” denotes base pairs exhibiting covariation according to R2R’s simplistic method. “0” denotes base pairs that are not observed to mutate and “?” denotes base pairs that have a significant frequency of non-canonical nucleotides for Watson-Crick or G-U pairs (> 5%). Below these base pair annotation is the consensus sequence: “R” = “A” or “G”, “Y” = “C” or “U”, **red nucleotides**: nucleotide identity con-

served more than 97% of the time, black nucleotides: 90%, gray nucleotides: 75%, red circle (●): nucleotide is present 97% of the time, black circle (●): 90%, gray circle (●): 75%, white circle (○): 50%. All percentages of sequences just described (e.g. 97% conserved) assume that sequences have been weighted by the GSC algorithm implemented by the Infernal software package.

alignment positions 1...47

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env-1      UUAUUUACC..CGGGUCGAGUACCCAAAA..UAUUG.AAAUU..
Psp-1-1   UUAUUUACA..AAGGUCGAGAACCCUAAAA.AAUUA.AUAAAU
env-2      UUAUUUACC..UGGGUCGAGAACCCAAAA.UAUUGA.AAUU..
env-3      UUAUUUACC..GAGGUCGGGACCCUAAA.AAUUA.AAAU..
Cca-2-1   UUAUUUACU..GAGGUCGAGAACCCUAAAAAUUA.ACUUUU
env-4      UUAUUUACC..GGGUCGUGUACCCAAA.AUUUA.UAUACU
env-5      UUAUUUACC..AGGGUCGGGACCCUAAAUUUUA.UGUGAU
env-6      UUAUUUACA..AGGGUCGGGACCCU...AUA.AUA...AUG
env-7      UUAUUUACG..AGGGUCGGGACCCUCGAAAUUUA.UGUGAU.AUG
env-8      UUAUUUACA..AGGGUCGGGACCCUACA.AAUUA.UGUGAU
env-9      UUAUUUACC..GAGGUCGGGACCCUACAAAUUUA.UGUGAU
Mth-1-1   UUAUUUACC..GAGGUCGGGACCCUACAUAUUUA.UGUGAU
env-10     UUAUUUACC..AGGGUCGGGACCCUACA.AAUUA.UGUGAU
env-11     UUAUUUACCAAGGGUCGGGACCCUACA.AAUUA.UGUGAU.AUG
env-12     UUAUUUACA..GGGGUCGGGACCCGACA.AAUUA.UGUGAU
Cly-1-1   UUAUUUACA..GGGGUCGGGACCCUACAAAUUUA.UGUGAU.AUG
env-13     UUAUUUACU..GAGGUCGAGAACCCUAAA.AUUUA.UCUUAU.AUG
env-14     UUAUUUACC..GAGGUCGUGUACCCUAAA.AUUUA.ACAU..
env-15     UUAUUUAAC..UAGGUCGAGAACCCUAAA.AUUUA.UAAU..AUG
env-16     UUAUUUACU..UAGGUCGAGAACCCUAAA.AUUUA.ACAUU..
env-17     UUAUUUAUA..GGGUCGAGACCCGACA.AAUUA.UUAAU..
env-18     UUAUUUACC..AAGGUCGAGAACCCUAAA.AUUUA.ACA..
env-19     UUAUUUAUC..GGAGUCGAGAACCCUAAA.AUUUA.UUUU..
env-20     UUAUUUACG..GGAGUCGGGACCCUAAA.AUUUA.UUUUU..
env-21     UUAUUUACG..GGAGUCGGGACCCUAAA.AUUUA.UUUUUUAUG
env-22     UUAUUUACG..GGAGUCGGGACCCUAAA.AUUUA.UUUUU..AUG
Pto-1-1   UUAUUUACG..GGAGUCGAGAACCCUAAA.AUUUA.UUUUU..
env-23     UUAUUUACG..GGAGUCGAGAACCCUAAA.AUUUA.UUCUUU..
env-24     UUAUUUACG..GGAGUCGAGAACCCUAAA.AUUUA.UUUUU..
env-25     UUAUUUACG..GGAGUCGAGAACCCUAAA.AUUUA.UUUU..AUG
env-26     UUAUUUAUU..GAGGUCGAGAACCCUAAA.AUUUA.UUUU..AUG
env-27     UUAUUUAUU..GAGGUCGAGAACCCUGCA.AAUUA.UUUU..
env-28     UUAUUUAUU..GAGGUCGAGAACCCUAAA.AUUUA.UUUU..
env-29     UUAUUUACC..GGGUCGAGUACCCUACA.AAUUA.UACUU..
env-30     UUAUUUACA..GAGGUCGGGACCCUACA.AAUUA.UCAUU..AUG
env-31     UUAUUUACC..GGGUCGAGAACCCUAAA.AUUUA.UCGCU..AUG
Cca-1-1   UUAUUUACC..GAGGUCGAGAACCCUAAAAUUUA.UCGU..
env-32     UUAUUUACA..GGGUCGGGACCCCAUA.AAUUA.UUAAA..AUG
env-33     UUAUUUACG..GAGGUCGGGACCCUAAAUAUUUA.UCAUU..AUG
env-34     UUAUUUACC..GAGGUCGGGACCCUACU.AAUUA.UAGUUUU..
env-35     UUAUUUACC..AAGGUCGAGAACCCUAAA.AAUUA.AAUU..
Tsp-1-1   UUAUUUACC..AAGGUCGGGACCCUAAA.AAUUA.AAAU..
Tme-1-1   UUAUUUACC..AAGGUCGGGACCCUAAA.AAUUA.AAUU..
env-36     UUAUUUACC..UAGGUCGAGAACCCUAAA.AAUUA.AAAUU..AUG
env-37     UUAUUUACC..AAGGUCGAGAACCCUAAAAUUUA.AAGA..AUG
env-38     UUAUUUACC..AAGGUCGAGAACCCUAAAAUUUA.AAGA..AUG
env-39     UUAUUUACC..AAGGUCGAGAACCCUAAAAUUUA.AAAA..AUG
env-40     UUAUUUACC..AAGGUCGAGAACCCUAAAAUUUA.AAAA..AUG
env-41     UUAUUUACC..AAGGUCGAGAACCCUAAA.AAUUA.AACA..
env-42     UUAUUUACC..AAGGUCGAGAACCCUACA.AAUUA.UUUU..
env-43     UUAUUUACC..AAGGUCGAGAACCCUACA.AAUUA.UUUU..AUG
env-44     UUAUUUACC..AAGGUCGGGACCCUACA.AAUUA.UUUU..AUG
env-45     UUAUUUACA..AAGGUCGAGAACCCUACA.AAUUA.UUUU..
env-46     UUAUUUAUC..AAGGUCGAGAACCCUACA.AAUUA.UUUU..
env-47     UUAUUUAUA..AAGGUCGAGAACCCUACA.AAUUA.UUUU..
env-48     UUAUUUAUC..GAGUUCGUGUACCCUACA.AAUUA.UUUU..AUG
env-49     UUAUUUACC..GAGUUCGUGUACCCUACA.AAUUA.UUUU..AUG
env-50     UUAUUUACC..GAGUUCGUGUACCCUACA.AAUUA.UUUU..AUG
env-51     UUAUUUACG..GAGGUCGAGAACCCUAAA.AAUUA.UUAUU..AUG
env-52     UUAUUUACC..GAGGUCGAGAACCCUAAA.AAUUA.UUAUU..
env-53     UUAUUUAUA..GAGGUCGAGAACCCUAAA.AAUUA.UUUU..
env-54     UUAUUUACA..GAGGUCGAGAACCCUAAA.AAUUA.UUUU..
env-55     UUAUUUACA..GAGGUCGAGAACCCUAAA.AAUUA.UUUU..
env-56     UUAUUUACG..GAGGUCGAGAACCCUAAA.AAUUA.UUUUU..AUG
env-57     UUAUUUACA..GGGUCGGGACCCCAUA.AAUUA.UUUUU..AUG
env-58     UUAUUUAUA..GGGUCGGGACCCCAUA.AAUUA.UUUUU..
env-59     UUAUUUACC..GGGUCGGGACCCCAUA.AAUUA.UUUUU..
env-60     UUAUUUAUC..GGGUCGGGACCCCAUA.AAUUA.UUUUU..

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<<<<<<...<<<<<...>>>>>>...>>>>>>.>.....
-102...22110...01122...201.....
5'UAUUUAY•RRGGUCGRG•ACCCYA•A•UUA•U•••••AUG

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