

Supporting Information

Association of OLE RNA with bacterial membranes via an RNA-protein interaction

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Running title: OLE RNA Membrane Localization

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Table S1. *Bacillus halodurans* raw transcriptomics data. See the legend to Fig. 2 for additional information.

Fig. S1. SDS-PAGE monitoring of the purification of OAP from bacteria membranes. Membranes were isolated from *E. coli* cells expressing a histidine-tagged construct derived from *B. halodurans* OAP. OAP was extracted from membranes upon incubation with zwitterionic detergent LysoFos Choline 14 (solubilized protein, lane 1). The majority of OAP was observed to be solubilized by comparison with the proteins that could be pelleted after treatment with detergent (lane 2). Solubilized OAP was further purified by application to a nickel affinity column. Flow-through samples (lanes 3, 4) contained small amounts of OAP. Bound proteins were eluted from the nickel affinity matrix with buffer containing 10 mM imidazole (Elutions I and II, lanes 5 and 6), followed by elution in buffer containing 200 mM imidazole (Elution III, lane 7). The arrowhead points to OAP protein, which is only observed in extracts from cells that have been induced with IPTG. Protein from Elution III was used for *in vitro* binding assays.

Fig. S2. Denatured OAP does not bind OLE RNA. Trace amounts of internally ³²P-labeled OLE₁₋₆₃₇ was incubated with 50 nM or 500 nM OAP that was incubated on ice (–) or denatured by 20-minute incubation at 95°C (+) prior to incubation with RNA. RNA was prepared by *in vitro* transcription as described for other RNAs, but was subjected only to a G25 size-exclusion column to remove unincorporated nucleotides and other small molecules or ions prior to use.

Table S2. Binding characteristics of OLE-related constructs.

Fig. S3. Subcellular localization of exogenously expressed RNA controls. *E. coli* cells expressing (A) *E. coli* SRP RNA or (B) *B. halodurans* *ispA* were probed for cellular localization of the corresponding RNA as described in Figure 7. Fluorescence signal from the membrane stain (FM 4-64 FX, far left), nucleic acid (DAPI, second left), antisense RNA probe (Alexa 488, second right) and merge (far right) are shown. The scale bar in the lower right panel denotes 5 μm.

Table S3. Primers used in this project.

Table S1

Gene ID	Reads	Length	RPKM
BA000004.3 (whole genome)	3989547	4202352	—
dnaA	454	1350	84.29436
dnaN	643	1143	141.0071571
BH0003	607	222	685.3495483
recF	1693	1116	380.2499606
BH0005	555	270	515.2353276
gyrB	4554	1914	596.3860922
gyrA	8204	2502	821.8920139
BH0008	775	1083	179.3699389
BH0009	125	807	38.82512767
BH0010	525	420	313.3187803
BH0011	342	447	191.7763273
BH0012	640	1530	104.8491605
BH0013	378	753	125.8268249
BH0014	516	1494	86.5716148
BH0015	102	186	137.455981
BH0016	287	849	84.73261715
BH0017	813	2865	71.12828437
BH0018	349	1074	81.45121365
rrnA-16S	4362	1552	704.4827421
rrnA-23S	0	2939	0
rrnA-5S	22	116	47.53802184
BH0019	48	954	12.61157355
guaB	629	1458	108.1358095
dacA	2813	1335	528.1592383
BH0022	4648	897	1298.823359
BH0023	3093	591	1311.803706
serS	1361	1278	266.9338717
BH0025	150	903	41.63704722
BH0026	1027	1926	133.656651
BH0027	1208	1017	297.7298616
BH0028	1124	1044	269.8623058
BH0029	560	945	148.5363107
BH0030	438	906	121.1775945
BH0031	14893	1617	2308.599429
trnA-Ser	64	93	172.4937801
BH0032	35	132	66.46155946
BH0033	251	480	131.0716898

scr	126985	272	117019.9568
dnaX	1608	1695	237.7895451
BH0035	821	312	659.5762016
recR	1097	597	460.5838553
BH0037	169	216	196.1143477
bofA	282	276	256.1040465
rrnB-16S	9838	1552	1588.881526
rrnB-23S	0	2939	0
rrnB-5S	0	116	0
BH0039	0	1257	0
csfB	11	201	13.71743914
BH0041	570	1449	98.60135529
tmk	372	633	147.3043744
BH0043	136	330	103.3002524
holB	631	987	160.2465251
BH0045	561	828	169.8278606
BH0046	369	351	263.509128
BH0047	172	741	58.18173302
BH0048	93	285	81.79269212
BH0049	261	870	75.19650727
abrB	309	291	266.1594587
BH0051	118	954	31.00345164
BH0052	462	1833	63.17655275
metS	524	1983	66.23461054
BH0054	187	711	65.92473915
BH0055	3810	1251	763.3858052
BH0056	372	558	167.1033495
ksgA	843	870	242.8760752
BH0058	87	876	24.8938209
BH0059	6295	267	5909.638118
sspF	439	186	591.5997615
BH0061	841	864	243.9824947
purR	967	849	285.492825
BH0063	430	375	287.4177611
spoVG	1812	294	1544.853415
gcaD	1224	1368	224.2702848
prs	792	951	208.7474019
rply	782	648	302.4880077
spoVC	309	558	138.8035887
mfd	1209	3546	85.46021554
spoVT	272	540	126.2558641

BH0071	1269	1602	198.5525754
BH0072	1537	1476	261.0140733
BH0073	356	267	334.206699
BH0074	202	312	162.2830606
BH0075	225	597	94.46797396
divIC	505	381	332.2330374
BH0077	1430	414	865.7890934
trnB-Met	1469	74	4975.840954
spoIIE	349	2493	35.08969252
BH0079	70	741	23.67861228
BH0080	72	984	18.34061153
BH0081	147	756	48.73847694
BH0082	69	453	38.1792421
BH0083	897	1389	161.8700912
hprT	497	540	230.6954575
ftsH	5603	1974	711.4590176
BH0086	317	765	103.8661996
BH0087	693	876	198.2921596
cysK	308	924	83.55167475
BH0089	0	1218	0
pabB	726	1461	124.5554741
pabA	489	597	205.3103967
pabC	360	888	101.6169017
sul	320	843	95.14781466
folA	160	345	116.2458083
folK	227	525	108.3784581
BH0096	166	222	187.4267298
BH0097	1765	1005	440.2050923
lysS	6215	1506	1034.409678
rrnC-16S	0	1552	0
trnC-Ile	36	77	117.189362
trnC-Ala	29	76	95.6446803
rrnC-23S	0	2939	0
rrnC-5S	56	116	121.0058738
trnD-Val	66	76	217.6741
trnD-Thr	156	73	535.6463532
trnD-Lys	405	76	1335.727432
trnD-Leu1	610	86	1777.901916
trnD-Gly	498	75	1664.349361
trnD-Leu2	1068	89	3007.860291
trnD-Arg	308	77	1002.620097

trnD-Pro	225	77	732.4335124
trnD-Ala	176	76	580.4642667
rrnD-16S	0	1553	0
rrnD-23S	0	2939	0
rrnD-5S	0	116	0
BH0099	0	1257	0
ctsR	207	471	110.1604884
BH0101	339	534	159.1236952
BH0102	660	1071	154.465281
clpC	2215	2442	227.3549872
BH0104	538	1374	98.14585374
BH0105	402	1074	93.82059567
BH0106	818	1089	188.2789806
BH0107	789	687	287.8701807
BH0108	599	474	316.7560327
gltX	2100	1458	361.0257551
cysE	230	690	83.55167475
cysS	489	1401	87.48772795
BH0112	286	420	170.6841356
BH0113	419	750	140.0326069
BH0114	226	513	110.4250204
sigH	845	654	323.8585558
rpmG	3463	150	5786.788993
secE	1430	195	1838.136844
nusG	3311	537	1545.472598
rplK	23206	426	13654.22651
rplA	14620	696	5265.196055
rplJ	16955	498	8533.847261
rplL	9721	366	6657.424838
BH0123	0	1218	0
BH0124	436	606	180.3392584
BH0125	263	114	578.2655384
rpoB	23610	3543	1670.326029
rpoC	24398	3621	1688.892925
BH0128	8132	249	8186.050832
rpsL	17885	420	10673.72645
rpsG	12686	471	6751.18819
fus	78663	2079	9484.019323
tufA	83508	1191	17574.89485
rpsJ	4643	309	3766.314814
rplC	17997	630	7160.378526

rplD	18110	624	7274.619373
rplW	7591	291	6538.564567
rplB	25762	831	7770.607382
rpsS	10091	279	9065.805913
rplV	12217	342	8953.954477
rpsC	11629	660	4416.465571
rplP	6395	435	3684.916966
rpmC	4695	204	5768.751661
rpsQ	3811	261	3659.9475
rplN	10169	369	6907.617728
rplX	7604	312	6108.912834
rplE	6271	540	2910.847513
rpsN	5498	186	7409.146899
rpsH	7145	399	4488.546737
rplF	14080	537	6572.109388
rplR	16551	363	11428.62619
rpsE	13194	501	6601.082614
rpmD	7457	189	9889.600613
rplO	10151	441	5769.612587
secY	26652	1293	5166.633957
adk	11910	654	4564.680946
map	20987	747	7042.16465
BH0157	3762	309	3051.664082
infA	2679	219	3066.232009
rpmJ	3215	114	7068.911429
rpsM	8442	366	5781.501953
rpsK	11425	390	7342.9068
rpoA	18124	945	4807.271597
rplQ	14544	363	10042.7732
BH0164	1376	837	412.0684747
BH0165	1214	849	358.4160182
BH0166	1001	798	314.4181444
truA	1251	792	395.9210042
rplM	2899	438	1659.015788
rpsI	2135	393	1361.700959
BH0170	186	828	56.30656342
BH0171	173	702	61.77110996
BH0172	205	744	69.06489243
BH0173	1	240	1.044395934
BH0174	12	2064	1.457296653
BH0175	15	408	9.215258244

BH0176	0	471	0
BH0177	18	819	5.508901632
BH0178	17	786	5.421291873
BH0179	69	663	26.08626949
BH0180	136	180	189.3837961
BH0181	74	726	25.54885922
BH0182	50	186	67.38038286
licH	582	1329	109.767663
BH0184	64	1149	13.96163756
BH0185	66	1347	12.28153794
BH0186	44	525	21.00727822
gutB	5	1065	1.176784151
BH0188	0	321	0
BH0189	1	1032	0.242882775
gatC	2	1260	0.397865118
gatB	3	285	2.638473939
gatA	2	483	1.037909003
BH0193	6	2052	0.732909428
phaN	44	897	12.29522973
phaE	12	1338	2.248027123
phaF	8	984	2.037845726
BH0197	3	360	2.088791869
phaG	7	816	2.150226924
phaH	4	507	1.977554432
BH0200	7	324	5.415386326
BH0201	5	774	1.619218503
BH0202	4	783	1.280485437
gbsA	11	1473	1.87182978
hbd	7	849	2.066649199
BH0205	20	1203	4.167165823
BH0206	2	426	1.176784151
BH0207	3	780	0.964057786
BH0208	2	1380	0.363268151
BH0209	0	249	0
BH0210	14	948	3.701656476
BH0211	30	528	14.24176274
BH0212	7	441	3.978651178
BH0213	2	1104	0.454085189
BH0214	5	987	1.269782291
BH0215	5	1245	1.006646684
BH0216	13	1422	2.291501628

BH0217	47	1374	8.57408016
pdh	81	1140	17.80969909
BH0219	98	1650	14.88738932
BH0220	34	2106	4.04666231
BH0221	6	444	3.387230057
BH0222	0	270	0
BH0223	24	1299	4.631039709
BH0224	14	1257	2.791702736
BH0225	69	996	17.36465529
BH0226	49	750	16.37612825
BH0227	56	753	18.6410111
BH0228	8	312	6.427051904
BH0229	18	471	9.579172901
BH0230	52	720	18.10286286
fnr	41	714	14.39335573
BH0232	13	612	5.32437143
BH0233	13	159	20.49380701
BH0234	5	198	6.329672329
BH0235	11	198	13.92527912
BH0236	16	3063	1.309330848
BH0237	242	1164	52.11212703
BH0238	4	438	2.289086979
cwID	9	717	3.146297375
BH0240	691	1053	164.4849209
gerD	10	639	3.922613838
kbaA	141	585	60.41428789
BH0243	11	762	3.618379615
BH0244	3	234	3.213525952
rrnE-16S	793	1552	128.0730891
rrnE-23S	13065	2939	1114.259235
rrnE-5S	55	116	118.8450546
trnE-Asn	79	75	264.0232922
trnE-Thr	558	73	1915.965802
BH0245	10	1326	1.890309383
BH0246	19	315	15.11887448
BH0247	12	693	4.34034674
BH0248	4	804	1.247039922
BH0249	3	1104	0.681127783
BH0250	2	894	0.560749495
BH0251	1	1260	0.198932559
ureA	4	303	3.308977218

ureB	3	375	2.005240194
ureC	9	1716	1.314624253
ureE	4	447	2.24299798
ureF	7	756	2.320879854
ureG	10	627	3.997687787
ureD	22	816	6.757856046
BH0259	13	999	3.261777092
BH0260	16	111	36.13045394
BH0261	306	228	336.4054273
trnF-Glu	49	75	163.7612825
trnF-Val	89	76	293.5302258
trnF-Thr	149	73	511.6109399
trnF-Tyr	120	85	353.8659166
trnF-Gln	265	75	885.6477523
trnF-Lys	25	76	82.45231061
trnF-Gly	32	75	106.9461437
trnF-Ala	25	76	82.45231061
BH0262	4	159	6.305786773
sigW	392	564	174.2141303
BH0264	438	642	171.0076334
BH0265	538	825	163.4574582
BH0266	2295	1257	457.6398414
BH0267	3301	1344	615.6341034
glmS	2012	1803	279.7104319
BH0269	0	471	0
BH0270	1	1326	0.189030938
BH0271	8	693	2.893564493
BH0272	30	996	7.549850128
BH0273	2	762	0.657887203
BH0274	0	222	0
BH0275	0	1356	0
BH0276	20	1626	3.083087629
BH0277	19	516	9.229545466
BH0278	47	189	62.3322018
BH0279	37	366	25.33944234
BH0280	137	2142	16.03162387
BH0281	48	642	18.74056256
BH0282	74	288	64.40441595
BH0283	54	798	16.96161818
BH0284	98	1074	22.8716875
BH0285	5	540	2.320879854

BH0286	7	780	2.249468166
BH0287	37	2169	4.275811847
BH0288	47	678	17.37579077
BH0289	32	1041	7.705053579
BH0290	2	906	0.553322349
BH0291	10	783	3.201213592
BH0292	31	534	14.55113437
BH0293	17	1257	3.389924751
BH0294	42	504	20.88791869
BH0295	29	588	12.36223759
BH0296	5	1893	0.662057645
licT	4	834	1.20218237
BH0298	7	168	10.44395934
BH0299	105	918	28.66969232
BH0300	18	297	15.19121359
BH0301	140	990	35.44616504
BH0302	7	168	10.44395934
BH0303	15	555	6.774460115
BH0304	4	366	2.739399172
BH0305	94	855	27.55739448
BH0306	579	432	335.9473589
BH0307	20	213	23.53568303
BH0308	68	546	31.21710925
BH0309	10	1017	2.464651172
BH0310	5	291	4.306787358
BH0311	0	1173	0
BH0312	5	273	4.59075136
BH0313	34	837	10.18192452
BH0314	0	138	0
BH0315	31	714	10.88278116
BH0316	37	939	9.876715545
BH0317	21	573	9.186309789
BH0318	5	456	2.748410354
BH0319	3	327	2.299587378
BH0320	36	618	14.60126355
BH0321	11	285	9.674404444
aadK	58	879	16.53923937
BH0323	143	558	64.23596499
BH0324	121	552	54.94430785
BH0325	6	573	2.62465994
BH0326	26	750	8.689374174

BH0327	439	1377	79.9110789
BH0328	1260	1815	174.0084466
BH0329	1218	1272	240.0140091
BH0330	1042	912	286.3843588
BH0331	607	378	402.5068776
BH0332	657	747	220.4556237
BH0333	135	846	39.99814217
BH0334	0	285	0
BH0335	0	786	0
BH0336	758	2403	79.06637885
BH0337	686	711	241.8415564
BH0338	2128	1884	283.1177769
BH0339	941	852	276.8384716
BH0340	622	525	296.966524
BH0341	1030	1032	250.1692587
BH0342	195	291	167.964707
BH0343	34	645	13.21282298
BH0344	498	84	1486.026215
BH0345	127	351	90.69284353
BH0346	1	279	0.898405105
appA	3	1551	0.484825966
appB	1	918	0.273044689
appC	2	918	0.546089377
appD	13	990	3.291429611
appF	32	999	8.028989766
BH0352	69	1125	15.37350815
BH0353	25	594	10.54945388
BH0354	22	255	21.62513935
BH0355	115	741	38.90057731
BH0356	1	1173	0.213687148
BH0357	2	525	0.954876283
atoE	14	1326	2.646433137
BH0359	2	747	0.671097789
cah	53	828	16.04434334
BH0361	335	4986	16.84104154
BH0362	5	564	2.222119009
BH0363	156	975	40.10480388
BH0364	13	201	16.21151898
BH0365	11	459	6.006983152
BH0366	63	936	16.87101125
BH0367	42	390	26.993618

BH0368	45	534	21.1226144
BH0369	16	450	8.91217864
BH0370	170	519	82.10280177
BH0371	80	1599	12.54058908
BH0372	56	669	20.98158648
BH0373	136	1380	24.70223427
BH0374	65	519	31.39224774
BH0375	126	585	53.98723599
BH0376	39	1716	5.696705096
BH0377	171	342	125.3275121
BH0378	320	672	119.3595354
BH0379	0	1218	0
BH0380	167	855	48.95834976
mphB	198	903	54.96090233
BH0382	105	693	37.97803398
BH0383	46	381	30.26281133
BH0384	40	774	12.95374802
BH0385	1	72	3.481319781
BH0386	48	885	13.59484877
BH0387	0	1173	0
BH0388	12	498	6.039880102
BH0389	29	975	7.455380208
BH0390	18	936	4.820288928
BH0391	25	705	8.888476037
BH0392	10	609	4.115846047
adaB	8	507	3.955108864
adaA	105	546	48.20288928
BH0395	56	717	19.57696145
BH0396	39	918	10.64874286
BH0397	305	1599	47.81099587
BH0398	131	714	45.98852686
BH0399	40	1194	8.397153241
BH0400	13	1320	2.468572208
BH0401	29	900	8.076661892
BH0402	21	501	10.50649802
BH0403	10	198	12.65934466
BH0404	3	261	2.881092233
BH0405	87	669	32.59639329
BH0406	10	525	4.774381414
BH0407	17	687	6.202526073
mta	183	768	59.7263925

BH0409	145	426	85.31685097
BH0410	54	909	14.89039748
BH0411	38	996	9.563143495
paiB	21	630	8.355167475
BH0413	7	2877	0.609866239
BH0414	545	1461	93.50238755
BH0415	147	414	89.00069701
BH0416	0	1218	0
BH0417	95	930	25.60454549
BH0418	31	612	12.69657803
BH0419	131	723	45.41605557
nagB	146	741	49.38681989
nagA	200	1194	41.9857662
BH0422	73	1368	13.37559705
BH0423	2	435	1.152436893
BH0424	17	417	10.21855015
BH0425	737	372	496.5934217
BH0426	112	498	56.37221429
BH0427	2690	906	744.2185598
BH0428	1852	558	831.9231271
BH0429	24	624	9.640577855
BH0430	76	672	28.34788965
BH0431	128	603	53.20703666
BH0432	252	1449	43.59217813
BH0433	111	498	55.86889095
BH0434	0	1284	0
BH0435	11	378	7.294193827
BH0436	35	417	21.03819148
BH0437	35	180	48.73847694
BH0438	321	2271	35.429442
BH0439	6	954	1.576446693
BH0440	2	774	0.647687401
BH0441	1	792	0.316483616
BH0442	1	804	0.31175998
BH0443	6	537	2.800614796
BH0444	8	306	6.553072529
BH0445	30	921	8.16465877
BH0446	24	711	8.460929088
BH0447	22	744	7.411842115
BH0448	59	924	16.0050286
BH0449	36	717	12.5851895

BH0450	60	759	19.81462642
BH0451	45	2175	5.185966019
BH0452	21	2973	1.770519848
BH0453	146	198	184.826432
BH0454	350	210	417.7583737
BH0455	1423	3180	112.1641822
BH0456	56	81	173.2923624
BH0457	11	375	7.352547378
BH0458	2	207	2.421787674
BH0459	46	294	39.21813304
BH0460	96	225	106.9461437
BH0461	246	372	165.7557418
BH0462	45	324	34.81319781
BH0463	216	1119	48.38381165
BH0464	142	825	43.1430466
BH0465	146	957	38.23995145
BH0466	80	504	39.78651178
BH0467	134	669	50.20593909
BH0468	1	972	0.257875539
BH0469	3	744	1.010705743
BH0470	6	867	1.734636846
BH0471	2	291	1.722714943
BH0472	139	1254	27.78393012
BH0473	103	675	38.2481
BH0474	999	720	347.7838461
BH0475	22	825	6.68413398
BH0476	235	870	67.70566747
BH0477	126	345	91.54357407
BH0478	114	474	60.28411975
BH0479	97	495	49.11825728
BH0480	129	438	73.82305509
BH0481	0	882	0
BH0482	12	1539	1.95442514
BH0483	6	2310	0.651052011
BH0484	0	978	0
BH0485	1	1098	0.228283264
BH0486	33	480	17.23253292
BH0487	102	1293	19.77325017
BH0488	41	651	15.78626113
BH0489	43	978	11.02061968
BH0490	41	1494	6.878752339

BH0491	34	1083	7.869132802
BH0492	42	1539	6.840487991
BH0493	57	1284	11.12720902
pelX	27	4131	1.638268132
BH0495	20	1125	4.45608932
kdgF	5	327	3.832645631
BH0497	50	744	16.84509572
BH0498	4	150	6.68413398
BH0499	179	657	68.29109488
aroI	164	552	74.46997097
nrdA	3686	2181	423.6196329
nrdB	2215	1038	534.8756057
BH0503	19	525	9.071324687
BH0504	15	390	9.640577855
BH0505	672	1320	127.6061942
BH0506	236	783	75.54864077
BH0507	153	252	152.1834076
BH0508	174	309	141.1455476
BH0509	19	147	32.39758817
BH0510	20	102	49.14804397
BH0511	237	1359	43.7124656
BH0512	671	1050	160.1804964
BH0513	1089	1119	243.9350504
BH0514	1114	1662	168.0082413
BH0515	8	318	6.305786773
psaA	7119	903	1976.094261
BH0517	137	747	45.97019856
BH0518	49	360	34.11693386
BH0519	200	1005	49.88159686
BH0520	204	1167	43.81630244
BH0521	1100	288	957.3629398
BH0522	907	351	647.7040085
rsbR	51	816	15.66593902
rsbS	40	357	28.08459655
rsbT	48	420	28.64628848
rsbU	151	1014	37.3263399
rsbV	56	333	42.15219627
rsbW	122	489	62.53560932
sigB	226	786	72.07129196
rsbX	127	621	51.26117243
BH0531	809	2187	92.72058281

BH0532	55	456	30.23251389
trnG-Asn	518	75	1731.190701
trnG-Ser	2893	91	7968.62621
trnG-Glu	74	75	247.3129573
trnG-Val	222	76	732.1765182
trnG-Asp	202	77	657.5625311
trnG-Leu1	200	83	603.9880102
trnG-Leu2	1639	84	4890.756961
trnG-Arg	215	77	699.8809118
trnG-Pro	188	77	611.9888904
trnG-Gly	527	74	1785.07024
trnG-Ile	45	77	146.4867025
rrnF-16S	0	1552	0
rrnF-23S	0	2939	0
rrnF-5S	0	116	0
BH0533	0	1257	0
BH0534	23	1149	5.017463497
BH0535	0	120	0
cckA	25	1509	4.152667731
BH0537	54	1452	9.321881067
BH0538	1	597	0.419857662
dhaS	5	1497	0.83719113
BH0540	1	75	3.34206699
BH0541	14	720	4.873847694
BH0542	143	1146	31.27719761
BH0543	106	159	167.1033495
rrnI-5S	1109	116	2396.348465
trnH-Met	40	74	135.4892023
BH0544	249	987	63.23515809
BH0545	121	474	63.98577623
BH0546	443	711	156.1746494
BH0547	176	456	96.74404444
BH0548	685	1032	166.3747012
BH0549	50	2157	5.810269454
BH0550	686	1929	89.13911178
BH0551	148	636	58.32852765
BH0552	228	198	288.6330582
BH0553	275	762	90.45949038
BH0554	388	1425	68.2485259
BH0555	66	1143	14.47351846
BH0556	111	204	136.385822

BH0557	650	2421	67.29688796
BH0558	260	303	215.0835192
BH0559	45	198	56.96705096
BH0560	176	714	61.78611242
groES	1410	285	1240.082752
groEL	10426	1635	1598.366534
BH0563	1078	369	732.2658974
BH0564	1771	711	624.346059
BH0565	3904	1206	811.407309
BH0566	557	1644	84.92387379
nikA	413	1620	63.90155865
nikB	193	945	51.1919785
nikC	121	834	36.36601671
BH0570	240	831	72.39134274
BH0571	116	816	35.63233188
BH0572	18	120	37.59825364
BH0573	166	885	47.01551867
chrA	87	1194	18.2638083
BH0575	8	309	6.489450466
BH0576	3	177	4.248390241
BH0577	3	555	1.354892023
BH0578	76	1410	13.51048358
BH0579	234	1362	43.06407905
BH0580	169	582	72.78470635
BH0581	122	606	50.46190257
BH0582	104	1125	23.17166446
BH0583	34	1176	7.246828932
BH0584	205	105	489.3740949
BH0585	154	549	70.31124542
BH0586	99	921	26.94337394
BH0587	3	348	2.160819175
BH0588	4	360	2.785055825
BH0589	4	1290	0.777224881
BH0590	23	2040	2.826012528
BH0591	21	1161	4.533811808
BH0592	30	1194	6.297864931
BH0593	18	636	7.09401012
BH0594	41	846	12.14758392
bglP	8	1911	1.049314597
gblH	10	1434	1.747942986
BH0597	133	657	50.74142804

BH0598	304	1347	56.56950807
BH0599	39	684	14.29173384
BH0600	126	2472	12.7761056
BH0601	35	1041	8.427402352
BH0602	25	1959	3.198762433
BH0603	14	1725	2.034301646
BH0604	170	957	44.52597087
BH0605	197	1158	42.64165784
BH0606	300	2190	34.33630469
guaA	1303	1542	211.805121
BH0608	365	1305	70.10657766
BH0609	421	1824	57.85403794
BH0610	488	1719	71.15744725
rrnG-16S	0	1552	0
trnI-Ile	132	77	429.6943273
trnI-Ala	20	76	65.96184848
rrnG-23S	3027	2939	258.1601764
rrnG-5S	5811	116	12556.52022
BH0611	0	1257	0
BH0612	1	1524	0.164471801
nasD	20	2424	2.068110761
nasE	8	324	6.189012944
nasC	79	2232	8.87175041
BH0616	231	645	89.7694738
bcsA	31	1098	7.076781194
BH0618	13	561	5.808405196
BH0619	37	951	9.75208822
sigV	25	534	11.73478578
BH0621	46	540	21.35209466
BH0622	24	198	30.38242718
purE	62	486	31.97656688
purK	206	1140	45.29380263
purB	372	1302	71.61572121
purC	102	714	35.80786061
BH0627	30	255	29.48882638
purL	97	684	35.54610724
purQ	335	2232	37.62071376
purF	177	1422	31.19967601
purM	139	1038	33.5655572
purN	65	567	28.73470296
purH	175	1536	28.55770133

purD	261	1287	50.83213778
BH0635	18	117	38.56231142
BH0636	3	279	2.695215314
BH0637	226	1746	32.44446476
BH0638	2954	1059	699.1831366
BH0639	388	303	320.9707901
adeC	451	1758	64.30342203
BH0641	791	549	361.1441242
BH0642	152	216	176.3868689
BH0643	488	321	381.0581054
BH0644	12	339	8.872744221
BH0645	15	411	9.147993585
BH0646	36	954	9.45868016
BH0647	196	690	71.20055761
pcrA	806	2244	90.03028054
lig	1083	2010	135.0544235
BH0650	733	1179	155.8355664
BH0651	14	372	9.433253601
BH0652	43	867	12.43156406
BH0653	23	606	9.513309501
BH0654	28	915	7.670317682
BH0655	1	342	0.732909428
BH0656	257	399	161.4494768
BH0657	14	918	3.822625642
BH0658	8	699	2.86872703
BH0659	24	102	58.97765276
BH0660	220	1506	36.6162718
BH0661	113	1116	25.37994421
BH0662	49	132	93.04618324
BH0663	43	1275	8.453463563
BH0664	22	612	9.010474728
BH0665	713	291	614.1478773
BH0666	3455	1458	593.9733256
BH0667	4856	1431	850.5805714
BH0668	8	1218	1.646338419
BH0669	0	219	0
BH0670	282	480	147.2598267
BH0671	152	1275	29.88201073
BH0672	40	858	11.68554892
BH0673	21	1359	3.873256445
BH0674	22	1257	4.386961443

BH0675	5	2061	0.608090791
BH0676	164	888	46.29214412
BH0677	65	570	28.58346768
BH0678	386	741	130.5706334
BH0679	4	474	2.115232272
BH0680	95	357	66.70091682
aldA	162	1521	26.69698483
BH0682	69	1569	11.0230699
lplA	124	993	31.30032528
alp	13	1119	2.911988664
BH0685	57	315	45.35662343
BH0686	35	345	25.42877058
BH0687	548	1377	99.75232628
BH0688	0	285	0
BH0689	0	786	0
BH0690	0	879	0
BH0691	19	1116	4.267424248
BH0692	0	279	0
BH0693	19	771	6.176972063
BH0694	68	330	51.65012621
BH0695	77	510	37.84399386
apr	61	2379	6.427051904
BH0697	9	699	3.227317909
BH0698	7	1038	1.690351801
BH0699	79	573	34.55802254
BH0700	116	1167	24.91515237
BH0701	7	1026	1.710121998
BH0702	1	534	0.469391431
BH0703	5	1305	0.960364078
BH0704	30	2406	3.125374367
BH0705	29	1419	5.122618536
BH0706	17	1038	4.105140089
BH0707	20	855	5.863275421
BH0708	26	1110	5.871198766
BH0709	3	729	1.031502157
BH0710	8	1167	1.71828637
BH0711	14	792	4.430770631
BH0712	28	924	7.595606795
BH0713	366	1737	52.81504829
BH0714	258	2463	26.25619012
BH0715	41	1437	7.151604728

BH0716	9	414	5.449022266
BH0717	5	306	4.095670331
BH0718	7	231	7.595606795
BH0719	31	567	13.70424295
BH0720	41	2064	4.979096896
BH0721	54	1800	7.519650727
BH0722	57	249	57.37886097
BH0723	6	444	3.387230057
BH0724	20	897	5.588740786
BH0725	36	939	9.609777287
BH0726	199	1017	49.04655833
BH0727	2326	1353	430.9117416
BH0728	116	948	30.67086795
BH0729	163	639	63.93860556
BH0730	391	1122	87.34947814
BH0731	324	927	87.60758129
BH0732	724	1374	132.0773199
BH0733	704	1068	165.2257838
BH0734	190	801	59.45624795
BH0735	533	282	473.7557728
BH0736	166	540	77.05321116
BH0737	113	357	79.33898526
BH0738	42	1020	10.32108923
BH0739	394	1695	58.26435372
BH0740	130	474	68.74504884
BH0741	22	126	43.76516296
BH0742	1	195	1.285410381
BH0743	5	318	3.941116733
BH0744	60	1914	7.857524271
BH0745	25	1329	4.715105798
BH0746	18	1338	3.372040685
BH0747	2	918	0.546089377
BH0748	18	2283	1.976255119
BH0749	9	504	4.475982576
BH0750	21	972	5.415386326
BH0751	19	630	7.559437239
BH0752	48	1929	6.237139017
BH0753	21	783	6.722548543
BH0754	26	1062	6.136563682
BH0755	13	699	4.661681424
BH0756	7	1233	1.423021224

BH0757	10	1674	1.497341841
BH0758	1	534	0.469391431
BH0759	3	990	0.75956068
BH0760	0	360	0
BH0761	19	1245	3.825257398
BH0762	30	1251	6.010911852
BH0763	13	783	4.161577669
BH0764	682	999	171.1178444
BH0765	57	948	15.07102994
BH0766	8	333	6.021742324
BH0767	0	1227	0
BH0768	5	702	1.785292195
BH0769	3	936	0.803381488
BH0770	1	387	0.647687401
BH0771	0	549	0
BH0772	4	1008	0.994662795
BH0773	0	378	0
BH0774	3	1320	0.56967051
BH0775	1	342	0.732909428
BH0776	0	981	0
BH0777	3	984	0.764192147
BH0778	1	1311	0.191193764
BH0779	22	1389	3.970057979
BH0780	535	951	141.0099243
BH0781	64	759	21.13560152
BH0782	32	1356	5.915162814
BH0783	21	729	7.220515102
BH0784	146	1182	30.96077288
BH0785	15	2637	1.425796497
BH0786	4	909	1.102992406
BH0787	1	615	0.407569145
BH0788	1	474	0.528808068
BH0789	11	2334	1.181321879
BH0790	9	1365	1.65267049
BH0791	166	3120	13.3361327
BH0792	10	1764	1.420946849
BH0793	12	1527	1.96978408
BH0794	1	939	0.266938258
BH0795	0	969	0
BH0796	23	1503	3.835705627
BH0797	159	882	45.18610981

BH0798	78	474	41.24702931
BH0799	35	1182	7.422103087
BH0800	0	900	0
BH0801	152	780	48.84559447
BH0802	148	759	48.87607851
BH0803	66	447	37.00946667
pdxA	221	1005	55.11916453
gntP	20	1371	3.656528435
BH0806	5	327	3.832645631
BH0807	20	1254	3.997687787
BH0808	28	678	10.35153492
BH0809	21	414	12.71438529
BH0810	10	792	3.164836165
BH0811	14	459	7.645251284
BH0812	25	513	12.21515713
BH0813	165	1065	38.833877
BH0814	151	633	59.79290468
BH0815	386	1836	52.69762492
BH0816	92	342	67.42766734
BH0817	70	693	25.31868932
BH0818	55	945	14.58838765
BH0819	69	930	18.59698567
BH0820	45	705	15.99925687
BH0821	1	708	0.35403252
BH0822	0	1320	0
BH0823	151	1101	34.3768471
BH0824	272	1395	48.8732377
BH0825	100	534	46.93914312
BH0826	11	756	3.647096914
fruB	83	921	22.58888926
fruA	45	1878	6.006110805
BH0829	2	402	1.247039922
BH0830	195	561	87.12607795
vpr	255	2400	26.63209633
BH0832	113	702	40.34760362
BH0833	89	453	49.24568909
BH0834	99	1686	14.71817758
BH0835	56	930	15.09320576
BH0836	222	717	77.60866859
BH0837	157	594	66.25057038
BH0838	1	45	5.57011165

BH0839	41	852	12.06203755
BH0840	99	321	77.30482056
BH0841	88	333	66.23916557
BH0842	82	2388	8.607082072
BH0843	28	1008	6.962639562
BH0844	1824	2028	225.4412052
BH0845	583	831	175.8506367
BH0846	281	879	80.12976315
BH0847	152	780	48.84559447
BH0848	31	540	14.3894551
BH0849	14	369	9.509946719
BH0850	12	447	6.728993939
BH0851	35	786	11.16148327
BH0852	109	405	67.46024109
BH0853	178	684	65.22893906
BH0854	270	321	210.8313288
BH0855	24	1086	5.539337552
BH0856	1	114	2.198728283
BH0857	72	849	21.25696319
BH0858	45	972	11.60439927
BH0859	11	372	7.411842115
BH0860	117	1377	21.29748572
BH0861	26	264	24.68572208
BH0862	0	138	0
BH0863	186	591	78.88635281
BH0864	100	651	38.50307592
BH0865	273	1359	50.35233379
BH0866	8	1542	1.300415171
BH0867	51	1620	7.890991504
BH0868	70	450	38.99078155
BH0869	22	585	9.426342792
BH0870	12	543	5.539337552
BH0871	189	1770	26.76485852
treA	4348	1680	648.7190746
treR	1226	714	430.3964422
BH0874	96	1335	18.02463096
BH0875	320	1008	79.57302357
BH0876	4007	1683	596.7764006
BH0877	404	1041	97.27630143
BH0878	527	1332	99.1705689
BH0879	307	858	89.68658793

BH0880	5	147	8.525681097
BH0881	12	147	20.46163463
BH0882	121	954	31.79167498
BH0883	279	378	185.0072798
BH0884	147	1206	30.55247808
BH0885	72	381	47.3678786
BH0886	45	1365	8.263352448
BH0887	43	804	13.40567916
BH0888	13	807	4.037813278
BH0889	184	1125	40.99602174
BH0890	4	609	1.646338419
BH0891	22	600	9.190684222
BH0892	17	798	5.339768687
BH0893	18	474	9.518545224
BH0894	1481	1539	241.2086361
BH0895	87	795	27.43017246
BH0896	23	363	15.8817233
BH0897	1066	1392	191.95277
BH0898	95	405	58.79562297
BH0899	54	633	21.38289306
BH0900	3	861	0.873362454
BH0901	10	990	2.531868932
araP	0	951	0
araQ	2	840	0.596797677
BH0904	2	621	0.807262558
araN	45	1338	8.430101712
BH0906	1578	2208	179.136607
BH0907	23	714	8.074321509
BH0908	207	246	210.9170326
BH0909	4	297	3.375825242
BH0910	7	333	5.269024534
BH0911	1	444	0.564538343
BH0912	5	1326	0.945154692
BH0913	53	714	18.60604522
BH0914	50	747	16.77744473
BH0915	0	1173	0
BH0916	34	1800	4.734594902
BH0917	41	297	34.60220873
ectC	1061	390	681.910207
BH0919	1370	1284	267.4434449
BH0920	443	570	194.8073259

BH0921	3	138	5.449022266
BH0922	2	117	4.284701269
BH0923	5	555	2.258153372
BH0924	138	801	43.18401167
BH0925	56	327	42.92563106
BH0926	33	156	53.02317821
BH0927	36	144	62.66375606
BH0928	80	267	75.10262899
BH0929	195	984	49.67248956
BH0930	29	324	22.43517192
BH0931	229	1119	51.29580031
BH0932	210	759	69.35119248
BH0933	34	411	20.73545213
BH0934	352	336	262.5909778
BH0935	683	969	176.6742844
BH0936	625	1158	135.2844475
BH0937	1	222	1.129076686
BH0938	503	750	168.1059696
sspE	137	207	165.8924557
BH0940	844	528	400.6682584
BH0941	849	1755	121.2570459
BH0942	135	1083	31.24508612
gsaB	210	1314	40.05902214
BH0944	24	324	18.56703883
BH0945	24	300	20.05240194
BH0946	38	594	16.0351699
BH0947	20	426	11.76784151
BH0948	274	465	147.6977992
BH0949	556	951	146.5448932
BH0950	116	297	97.89893203
BH0951	825	438	472.1241895
BH0952	190	366	130.1214607
BH0953	52	885	14.72775284
rrnH-16S	2744	1553	442.8830564
rrnH-23S	0	2939	0
rrnH-5S	28700	116	62015.51031
trnJ-Asn	405	75	1353.537131
trnJ-Ser	1165	94	3106.522375
trnJ-Glu	85	72	295.9121814
trnJ-Val	49	76	161.6065288
trnJ-Met	179	77	582.6915499

trnJ-Asp	158	77	514.3310887
trnJ-Phe	137	76	451.8386621
trnJ-Thr	214	76	705.7917788
trnJ-Tyr	197	85	580.9298797
trnJ-Trp	2453	74	8308.875331
trnJ-His	927	76	3057.331677
trnJ-Gln	247	75	825.4905465
trnJ-Gly	195	75	651.703063
trnJ-Cys	612	71	2160.575702
trnJ-Leu	409	89	1151.886572
trnJ-Arg	89	77	289.7181449
BH0954	0	1215	0
BH0955	0	486	0
BH0956	1	471	0.532176272
BH0957	2	453	1.106644699
BH0958	0	366	0
BH0959	0	240	0
BH0960	4	1755	0.571293503
BH0961	4	705	1.422156166
BH0962	11	3981	0.692591125
BH0963	1	411	0.609866239
BH0964	0	378	0
BH0965	1	408	0.61435055
BH0966	7	1017	1.725255821
BH0967	2	237	2.115232272
trnK-Leu	1215	86	3541.230866
BH0968	10	1476	1.698204771
BH0969	12	1734	1.734636846
BH0970	916	468	490.5982953
BH0971	2188	3042	180.2870457
BH0972	5000	291	4306.787358
BH0973	106	243	109.3392287
BH0974	259	1323	49.0700312
BH0975	1504	4470	84.33672404
BH0976	272	417	163.4968024
BH0977	122	261	117.1644175
BH0978	706	1512	117.0386555
BH0979	17	642	6.637282573
BH0980	19	309	15.41244486
BH0981	0	1356	0
BH0982	2937	1386	531.1499323

BH0983	1631	474	862.4859589
BH0984	1128	372	760.0507187
BH0985	366	234	392.0501661
BH0986	1439	627	575.2672725
BH0987	15	612	6.143505496
BH0988	35	600	14.62154308
BH0989	47	837	14.07501331
BH0990	14	984	3.56623002
BH0991	2	1332	0.376358895
BH0992	49	1365	8.997872665
BH0993	0	1284	0
BH0994	6	1188	1.265934466
BH0995	9	1407	1.603337042
BH0996	22	147	37.51299683
BH0997	122	681	44.90442431
BH0998	14	900	3.899078155
BH0999	25	468	13.38969147
BH1000	98	453	54.22559023
BH1001	853	1347	158.7295736
BH1002	20	606	8.272443044
BH1003	59	918	16.10963663
BH1004	131	1605	20.45844746
BH1005	2119	1458	364.2921786
BH1006	1493	867	431.6354685
htpG	743	1878	99.16756284
BH1008	60	954	15.76446693
BH1009	6	348	4.321638349
BH1010	34	609	13.99387656
BH1011	295	894	82.7105505
BH1012	93	783	29.7712864
BH1013	27	468	14.46086678
BH1014	24	537	11.20245918
BH1015	292	3414	21.43856681
BH1016	12	1611	1.867076531
BH1017	0	609	0
dps	110	441	62.52166138
BH1019	38	675	14.11094951
BH1020	153	1176	32.61073019
dat	200	528	94.94508494
BH1022	21	897	5.868177825
cspR	57	474	30.14205988

BH1024	312	90	868.9374174
BH1025	22	954	5.780304542
BH1026	21	948	5.552484714
BH1027	15	759	4.953656606
BH1028	75	990	18.98901699
prkA	11	1896	1.454222187
sipV	208	549	94.96583796
BH1031	25	1167	5.369644907
BH1032	2	45	11.1402233
BH1033	29	879	8.269619685
BH1034	2	594	0.843956311
BH1035	16	1305	3.073165048
BH1036	10	777	3.225933388
BH1037	130	1026	31.75940853
BH1038	177	1950	22.75176374
BH1039	115	816	35.3251566
BH1040	96	798	30.15398788
BH1041	43	480	22.45451259
BH1042	59	732	20.20306889
BH1043	10	114	21.98728283
BH1044	23	324	17.79341221
BH1045	166	606	68.66127727
BH1046	226	603	93.94367409
BH1047	187	816	57.44177639
BH1048	246	735	83.89270199
BH1049	1	1218	0.205792302
BH1050	89	1116	19.98951358
BH1051	47	639	18.43628504
BH1052	41	435	23.62495631
BH1053	67	549	30.58995742
BH1054	98	2706	9.077676414
BH1055	82	1272	16.15857861
BH1056	65	1107	14.71777468
BH1057	20	441	11.3675748
hmp	12	1236	2.433543925
argE	14	1272	2.758781713
BH1060	9	1188	1.898901699
BH1061	264	2049	32.29523006
BH1062	153	681	56.31456492
BH1063	34	1086	7.847394866
BH1064	6	1653	0.9098186

BH1065	2	954	0.525482231
BH1066	4	882	1.13675748
BH1067	3	846	0.888847604
BH1068	12	1509	1.993280511
BH1069	20	897	5.588740786
BH1070	144	1062	33.98712193
BH1071	112	621	45.20670324
BH1072	255	1212	52.73682441
BH1073	151	456	83.00199268
BH1074	0	813	0
BH1075	0	606	0
BH1076	8	1137	1.763623741
BH1077	6	948	1.586424204
BH1078	4	813	1.233235052
BH1079	1	1380	0.181634076
BH1080	30	753	9.986255946
fhuC	55	825	16.71033495
fhuG	47	1005	11.72217526
fhuB	35	1017	8.626279104
glgP	6	2448	0.61435055
glgA	9	1431	1.576446693
glgD	2	1107	0.452854606
glgC	1	1152	0.217582486
BH1088	233	459	127.2388249
BH1089	389	1539	63.3559483
BH1090	5	567	2.210361766
glpP	17	552	7.71944821
glpF	438	831	132.1142005
glpK	1160	1494	194.6183588
BH1094	557	1224	114.0644187
glpD	2473	1662	372.9662304
BH1096	5	489	2.562934808
BH1097	48	318	37.83472064
BH1098	48	396	30.38242718
BH1099	1152	504	572.9257697
BH1100	4	1557	0.643943543
BH1101	2	1170	0.428470127
BH1102	1	246	1.018922863
BH1103	0	1107	0
BH1104	1	1095	0.228908698
BH1105	4	1128	0.888847604

BH1106	789	1737	113.855391
galK	21	1188	4.430770631
galE	27	1005	6.734015577
galT	89	1527	14.60923193
BH1110	152	219	173.9706104
BH1111	262	324	202.6901739
spoVR	3	1236	0.608385981
BH1113	0	105	0
BH1114	55	2805	4.914804397
BH1115	21	1101	4.780886021
BH1116	150	3192	11.77890152
BH1117	3	1305	0.576218447
BH1118	6	957	1.571504854
BH1119	2	846	0.592565069
BH1120	25	1077	5.818361751
BH1121	3	633	1.187938504
BH1122	3	1761	0.427010263
BH1123	22	1581	3.487925701
BH1124	1078	510	529.815914
BH1125	190	1746	27.27631993
BH1126	408	1806	56.62638421
BH1127	51	1203	10.62627285
BH1128	487	1362	89.6248141
BH1129	101	1176	21.52734477
BH1130	4	1146	0.874886647
BH1131	2	1641	0.305490584
BH1132	4	1359	0.737763132
BH1133	1	213	1.176784151
BH1134	9	912	2.473569318
BH1135	7	783	2.240849514
BH1136	12	1515	1.985386331
BH1137	47	1947	6.050737617
sspA	3	204	3.686103298
BH1139	2	246	2.037845726
BH1140	147	1098	33.55763986
BH1141	157	894	44.01883535
BH1142	19	186	25.60454549
BH1143	17	216	19.72747876
BH1144	0	489	0
BH1145	2	1215	0.412600863
BH1146	1	1380	0.181634076

BH1147	8	1347	1.488671265
BH1148	166	1113	37.3843073
BH1149	1401	351	1000.477746
BH1150	64	1356	11.83032563
BH1151	61	843	18.13755217
BH1152	224	1497	37.50616261
BH1153	51	699	18.28813482
BH1154	152	2253	16.91059196
BH1155	697	99	1764.712645
BH1156	24	51	117.9553055
BH1157	1542	1752	220.6107576
BH1158	1969	2025	243.7233297
BH1159	36	1725	5.231061375
BH1160	31	582	13.35104081
BH1161	51	1221	10.46962018
BH1162	29	180	40.38330946
BH1163	60	750	20.05240194
BH1164	90	408	55.29154947
BH1165	143	858	41.77583737
natA	201	900	55.97962208
BH1167	391	1278	76.68710053
BH1168	785	270	728.7562742
BH1169	1464	843	435.3012521
BH1170	0	1326	0
BH1171	4	357	2.808459655
BH1172	159	684	58.26629949
BH1173	384	1431	67.26172558
BH1174	276	1200	57.65065558
BH1175	501	963	130.4030811
BH1176	74	276	67.20460795
prsA	1863	1002	466.0382337
BH1178	21	87	60.50293689
BH1179	7	87	20.16764563
BH1180	54	180	75.19650727
BH1181	79	600	33.00291153
BH1182	41	543	18.92606997
BH1183	0	1215	0
BH1184	13	219	14.87906537
hpr	188	579	81.38712359
BH1186	320	345	232.4916167
BH1187	173	192	225.8506208

serC	1247	1086	287.814747
hit	97	429	56.67491224
BH1190	70	495	35.44616504
ecsA	223	744	75.12912689
ecsB	761	1218	156.6079421
BH1193	583	750	194.8425055
ccdA	76	717	26.56873339
BH1195	7	408	4.300453847
BH1196	13	663	4.914804397
BH1197	24	861	6.98689963
BH1198	240	813	73.9941031
BH1199	456	1056	108.2373968
BH1200	205	630	81.56234916
pbpF	34	2160	3.945495752
hemE	187	1035	45.2874295
hemH	238	933	63.93986685
hemY	669	1404	119.4360479
BH1205	119	1098	27.16570846
BH1206	115	156	184.7777422
BH1207	0	1284	0
BH1208	3	186	4.042822972
BH1209	349	1011	86.52680857
BH1210	96	759	31.70340228
BH1211	80	795	25.22314709
spo0B	358	534	168.0421324
obg	1516	1284	295.9447171
pheB	447	444	252.3486393
pheA	633	879	180.5058366
BH1216	135	540	62.66375606
nifS	86	1128	19.11022348
nadB	3	1530	0.49148044
nadC	7	846	2.073977742
nadA	11	1104	2.497468539
BH1221	1	1335	0.187756572
BH1222	79	981	20.18526699
BH1223	1	537	0.466769133
ruvA	284	612	116.3170374
ruvB	522	762	171.7085599
BH1226	58	216	67.30551577
queA	1592	1044	382.2249029
tgt	2372	1140	521.5383487

BH1229	1040	267	976.3341768
BH1230	6	384	3.916484754
BH1231	11	1287	2.142350635
BH1232	3	657	1.14454349
spoVB	89	1569	14.21816262
BH1234	279	405	172.6734611
BH1235	355	276	322.4004841
secD	1356	1314	258.6668287
secF	1267	936	339.2947817
BH1238	132	903	36.64060155
BH1239	51	318	40.19939068
BH1240	1727	2355	183.8136844
apt	634	516	307.9753592
relA	1839	2187	210.7702742
BH1243	815	441	463.2286729
BH1244	24	1323	4.547029918
BH1245	11	1338	2.06069153
BH1246	14	822	4.269063673
BH1247	13	723	4.506936812
BH1248	56	1023	13.72109615
BH1249	114	969	29.48882638
BH1250	94	1017	23.16772102
hisS	698	1287	135.9418857
aspS	1297	1788	181.8230237
BH1253	89	1254	17.78971065
BH1254	27	300	22.55895218
BH1255	947	780	304.3209076
BH1256	154	612	63.07332309
BH1257	205	1287	39.92562546
BH1258	300	705	106.6617124
BH1259	251	420	149.7962169
BH1260	1113	1161	240.2920258
BH1261	998	1116	224.1520737
BH1262	266	645	103.3709092
BH1263	492	1176	104.8658775
BH1264	458	474	242.1940952
BH1265	228	189	302.3774896
BH1266	30	1077	6.982034101
alaS	2153	2640	204.4167679
BH1268	806	273	740.0291192
BH1269	2490	423	1475.487022

BH1270	1218	282	1082.616381
BH1271	2444	1149	533.1600342
BH1272	309	672	115.2565513
BH1273	847	930	228.2847371
BH1274	1591	1263	315.7499157
udk	818	636	322.3833488
greA	854	477	448.7618254
BH1277	381	552	173.0064569
BH1278	38	210	45.35662343
BH1279	416	696	149.8167961
BH1280	99	246	100.8733634
BH1281	96	624	38.56231142
BH1282	9	669	3.372040685
BH1283	169	216	196.1143477
BH1284	130	1425	22.86677414
sigK	0	708	0
BH1286	12	357	8.425378966
BH1287	15	555	6.774460115
xre	32	339	23.66065126
BH1289	5	159	7.882233467
BH1290	48	582	20.67257932
BH1291	56	432	32.49231796
BH1292	35	120	73.1077154
BH1293	111	285	97.62353576
cwlC	307	762	100.9856856
BH1295	324	2646	30.69245195
BH1296	6	840	1.79039303
BH1297	21	828	6.357192644
BH1298	210	834	63.11457445
BH1299	115	738	39.05870974
BH1300	68	543	31.38957946
BH1301	0	1284	0
BH1302	25	720	8.703299453
BH1303	1	789	0.317686976
BH1304	0	183	0
BH1305	0	213	0
katX	10	1602	1.564638104
BH1307	0	1326	0
BH1308	37	966	9.600658278
BH1309	3482	273	3196.999247
pssA	267	540	123.9349842

psd	149	780	47.88153668
BH1312	102	459	55.7011165
BH1313	111	354	78.59521947
BH1314	134	288	116.6242127
BH1315	153	477	80.39878136
BH1316	484	1482	81.8603453
BH1317	197	339	145.6608843
BH1318	179	441	101.7397944
BH1319	832	2415	86.35402906
BH1320	1	231	1.085086685
BH1321	88	141	156.4371783
BH1322	420	516	204.0215314
BH1323	831	1104	188.672396
aroD	847	837	253.6497079
BH1325	294	291	253.2390967
BH1326	701	624	281.5852115
BH1327	345	564	153.3262116
BH1328	306	354	216.6679023
BH1329	1024	873	294.010017
BH1330	818	744	275.5857659
comER	131	828	39.65677316
BH1332	31	261	29.7712864
comEA	49	633	19.40299556
comEB	58	567	25.64019648
comEC	48	2322	5.181499209
BH1336	64	138	116.2458083
BH1337	620	1029	151.0263509
BH1338	0	1215	0
rpsT	3937	276	3575.466777
gpr	18	1119	4.031984304
BH1341	3	339	2.218186055
lepA	903	1830	123.6838726
hemN	261	1158	56.49478526
hrcA	1150	1032	279.3151917
grpE	684	585	293.0735668
dnaK	5414	1845	735.5264505
BH1347	0	1218	0
dnaJ	754	1113	169.8058295
BH1349	1051	942	279.6586311
BH1350	1087	753	361.8353404
BH1351	1362	1347	253.4462829

dra	1168	675	433.7260271
BH1353	67	933	17.99987848
rpsU	2950	174	4249.611043
BH1355	5273	444	2976.810682
BH1356	1423	1338	266.5785497
BH1357	3415	996	859.4246062
BH1358	1965	531	927.5652027
BH1359	8	294	6.820544877
BH1360	76	1194	15.95459116
phoH	937	963	243.8875989
BH1362	750	2166	86.7919059
BH1363	341	480	178.0695068
BH1364	263	393	167.7411485
BH1365	363	753	120.8336969
cdd	339	399	212.9625394
bex	825	915	226.0004317
BH1368	59	150	98.5909762
BH1369	234	765	76.67094859
glyQ	383	894	107.3835283
glyS	811	2082	97.63747582
BH1372	622	645	241.7169381
BH1373	709	813	218.5909129
BH1374	329	474	173.9778544
dnaG	2190	1800	304.9636128
sigA	1817	1119	407.0064156
BH1377	116	531	54.75702978
cccB	1690	375	1129.618643
BH1379	178	708	63.01778858
BH1380	384	1119	86.01566516
BH1381	15	450	8.355167475
BH1382	798	945	211.6642427
BH1383	108	495	54.68836893
BH1384	1	759	0.330243774
BH1385	965	1317	183.6614263
BH1386	736	897	205.6656609
BH1387	29	267	27.22470301
BH1388	426	1107	96.45803101
BH1389	899	753	299.2548032
BH1390	1674	879	477.3566673
BH1391	1437	696	517.5161923
ppk	447	2118	52.90028132

BH1393	12	1557	1.93183063
BH1394	91	780	29.24308616
BH1395	68	864	19.72747876
BH1396	120	417	72.13094223
BH1397	33	108	76.58903519
BH1398	9	222	10.16169017
BH1399	165	588	70.33686905
BH1400	10	477	5.254822311
gcpE	2383	1104	541.0425025
BH1402	1	327	0.766529126
BH1403	55	1212	11.37460919
BH1404	772	894	216.4493051
BH1405	236	651	90.86725917
BH1406	70	780	22.49468166
BH1407	949	1632	145.7546679
trnL-Asn	270	75	902.3580873
trnL-Met1	294	74	995.8456369
trnL-Met2	1572	77	5117.268807
trnL-Ser	885	93	2385.265553
BH1408	65	471	34.5914577
sodA	5613	609	2310.224386
BH1410	103	1290	20.0135407
pbpA	1321	2085	158.8082911
BH1412	0	1218	0
BH1413	122	363	84.24218446
BH1414	16	660	6.076485436
BH1415	141	2772	12.74976855
mpg	31	750	10.36040767
BH1417	268	561	119.7425071
BH1418	327	789	103.8836412
moeB	787	1023	192.8304048
nahS	263	198	332.9407645
BH1421	277	1545	44.93944448
BH1422	7	879	1.996115096
BH1423	13	1464	2.225761827
BH1424	5	516	2.428827754
glk	988	993	249.3929144
ansB	1470	1416	260.2139023
BH1427	34	1725	4.940446855
BH1428	4	411	2.439464956
BH1429	25	642	9.760709667

BH1430	478	1110	107.9397312
BH1431	245	636	96.55735997
BH1432	117	198	148.1143325
BH1433	339	786	108.1069379
BH1434	498	1098	113.6850656
BH1435	424	813	130.7229155
BH1436	173	591	73.37279051
BH1437	481	1077	111.9452801
BH1438	110	435	63.38402912
BH1439	78	516	37.88971297
BH1440	94	729	32.32040093
BH1441	282	552	128.0520233
BH1442	21	180	29.24308616
BH1443	28	324	21.6615453
BH1444	38	219	43.49265261
citG	42	1389	7.579201597
BH1446	998	1221	204.8760968
BH1447	153	432	88.77365442
BH1448	129	540	59.87870024
BH1449	0	117	0
BH1450	4	246	4.075691451
BH1451	8	213	9.414273211
BH1452	29	141	51.55316101
BH1453	319	987	81.01211017
BH1454	89	1077	20.71336783
BH1455	45	1083	10.41502871
BH1456	16	1521	2.636739243
BH1457	47	1701	6.9258002
BH1459	8	858	2.337109783
BH1458	1	288	0.870329945
BH1460	18368	162	28419.94744
BH1461	1291	831	389.4050978
BH1462	341	657	130.0964433
BH1463	588	723	203.8522189
BH1464	138	981	35.2603398
BH1465	137	513	66.93906105
BH1466	190	783	60.82305825
BH1467	10	90	27.85055825
BH1468	527	417	316.7750546
BH1469	1501	1119	336.2226911
BH1470	59	1443	10.24854222

BH1471	39	207	47.22485964
BH1472	146	1242	29.46508337
BH1473	0	1143	0
BH1474	1048	2238	117.3755431
BH1475	203	300	169.6098997
BH1476	894	426	526.0225157
BH1477	3203	1395	575.5183101
BH1478	190	438	108.7316315
BH1479	110	603	45.72479713
BH1480	52	435	29.96335922
BH1481	162	1017	39.92734899
BH1482	20	441	11.3675748
BH1483	0	252	0
BH1484	453	753	150.7924648
BH1485	0	147	0
cysH	3	696	1.080409587
BH1487	20	1146	4.374433233
BH1488	10	1077	2.3273447
BH1489	4	609	1.646338419
BH1490	0	45	0
BH1491	21	1767	2.97892219
BH1492	4	822	1.219732478
BH1493	8	897	2.235496314
BH1494	16	303	13.23590887
BH1495	53	1458	9.11160239
BH1496	41	840	12.23435237
BH1497	25	642	9.760709667
BH1498	23	531	10.85699728
BH1499	363	759	119.8784899
BH1500	243	1371	44.42682049
BH1501	88	825	26.73653592
BH1502	20	225	22.2804466
BH1503	178	840	53.11499323
BH1504	195	1251	39.07092704
BH1505	159	1125	35.42591009
BH1506	200	780	64.27051904
BH1507	29	261	27.85055825
BH1508	246	1848	33.36641556
BH1509	264	1503	44.02722981
BH1510	277	732	94.85169633
BH1511	426	864	123.5868522

BH1512	455	522	218.4828276
BH1513	22	1527	3.611270814
BH1514	4	597	1.679430648
BH1515	333	522	159.9006189
BH1516	29	1032	7.043600487
BH1517	184	966	47.74381414
BH1518	161	1014	39.79828294
BH1519	153	963	39.82369544
BH1520	214	642	83.55167475
BH1521	113	837	33.83992561
BH1522	74	534	34.73496591
BH1523	6	1185	1.269139363
BH1524	114	552	51.76571153
BH1525	326	1176	69.48430094
spoIIM	139	654	53.27377427
BH1527	858	453	474.7505757
BH1528	319	228	350.6971611
BH1529	730	900	203.3090752
BH1530	1039	1182	220.3304316
BH1531	1151	819	352.2636543
BH1532	1456	828	440.7653566
pdp	3273	1302	630.1028374
BH1534	1396	417	839.1232946
dacF	39	1164	8.398235348
spoIIAA	13	351	9.283519416
spoIIAB	18	441	10.23081732
sigF	31	759	10.23755698
spoVAC	1	456	0.549682071
spoVAD	3	1008	0.745997096
spoVAE	1	351	0.714116878
spoVAE	2	567	0.884144706
spoVAF	9	1482	1.522196503
BH1544	558	1320	105.9587148
BH1545	734	438	420.0474607
BH1546	0	1218	0
BH1547	96	1986	12.11625495
BH1548	0	1284	0
BH1549	6	1125	1.336826796
BH1550	23	2070	2.785055825
BH1551	12	1404	2.142350635
BH1552	29	1257	5.782812811

BH1553	41	756	13.59372486
ribG	576	1107	130.4221264
ribB	310	648	119.9121258
ribA	464	1215	95.7234002
ribH	125	471	66.52203403
ribT	81	348	58.34211771
BH1559	95	537	44.3430676
BH1560	234	783	74.90839805
BH1561	152	594	64.1406796
BH1562	21	807	6.522621449
BH1563	23	882	6.536355507
BH1564	10	1563	1.603678978
BH1565	2	666	0.752717791
BH1566	4	504	1.989325589
BH1567	0	420	0
BH1568	3	480	1.566593902
BH1569	4	1017	0.985860469
BH1570	4	351	2.856467513
BH1571	2	189	2.652434119
BH1572	5	852	1.470980189
BH1573	1	1149	0.218150587
BH1574	0	594	0
BH1575	2	537	0.933538265
rluB	239	729	82.17633854
resA	309	531	145.8613983
resB	1005	1671	150.7530218
resC	727	1200	151.8551689
resD	351	717	122.7055976
resE	1503	1785	211.0557431
BH1582	47	432	27.27033829
BH1583	37	477	19.44284255
BH1584	79	957	20.69148058
BH1585	7972	984	2030.713266
BH1586	1406	1062	331.8464822
BH1587	1624	1476	275.7884549
cobD	467	960	121.9332253
BH1589	365	1113	82.20043472
cobP	220	567	97.2559177
cobQ	406	1506	67.57366523
cobS	249	786	79.40598096
BH1593	276	630	109.8107725

BH1594	216	423	127.9940549
BH1595	194	591	82.27931422
BH1596	251	918	68.53421687
BH1597	10	1491	1.681120216
BH1598	2	1113	0.450413341
BH1599	13	1110	2.935599383
BH1600	11	912	3.023251389
BH1601	117	384	76.3714527
BH1602	2221	1623	343.0097405
BH1603	11	1068	2.581652871
BH1604	1316	492	670.4512437
BH1605	413	249	415.7450804
BH1606	224	1080	51.98770873
BH1607	205	1476	34.81319781
BH1608	73	597	30.64960933
BH1609	71	240	74.15211134
BH1610	130	450	72.41145145
BH1611	64	237	67.68743271
BH1612	9	336	6.713973864
BH1613	245	1215	50.54360571
BH1614	297	939	79.28066262
sigY	234	531	110.4581463
BH1616	510	969	131.923697
BH1617	26	414	15.74161988
BH1618	176	771	57.21826753
BH1619	65	135	120.6857524
BH1620	386	606	159.6581508
ddlA	464	918	126.6927356
BH1622	1059	1266	209.6711459
BH1623	517	969	133.7344144
BH1624	623	969	161.1538494
BH1625	16	648	6.189012944
BH1626	71	162	109.8549798
metB	235	1137	51.8064474
metC	211	1173	45.08798816
BH1629	329	1857	44.4079176
metH	613	3441	44.65316183
sleB	4	993	1.009687912
BH1632	6	1344	1.118995644
BH1633	87	678	32.1636978
cmk	944	669	353.6896007

BH1635	933	588	397.7230232
ypfD	2821	1152	613.8001939
BH1637	17	612	6.962639562
BH1638	716	1314	136.5821898
BH1639	563	621	227.2444101
gpsA	1687	1038	407.3747841
BH1641	153	270	142.0378471
BH1642	0	471	0
BH1643	48	210	57.29257697
BH1644	262	756	86.8672174
spoIVA	67	1479	11.35489292
mtrA	300	567	132.6217059
mtrB	233	231	252.8251976
gerCA	357	819	109.2598824
gerCB	491	738	166.7637085
BH1650	667	834	200.4639103
BH1651	739	621	298.2835152
BH1652	894	864	259.3583237
gerCC	1419	972	365.9253903
ndk	93	444	52.50206589
cheR	247	774	79.98939404
aroF	1426	1173	304.7178726
aroB	1202	969	310.9260466
aroH	625	378	414.4428311
trpE	553	1509	91.85701021
trpD	385	1029	93.78249206
trpC	264	774	85.49473695
trpF	221	657	84.31470374
trpB	455	1200	95.04003003
trpA	294	798	92.34658788
hisC	1492	1110	336.916483
tyrA	557	1101	126.8073102
aroE	1760	1296	340.3957119
BH1668	188	927	50.83402865
BH1669	237	804	73.88711535
BH1670	412	552	187.0830978
BH1671	98	468	52.48759055
qcrA	3650	501	1826.129418
qcrB	2935	672	1094.750738
qcrC	2979	783	953.641529
BH1675	156	609	64.20719833

BH1676	311	786	99.17775132
BH1677	396	675	147.0509476
BH1678	93	873	26.70208162
BH1679	82	345	59.57597678
dapB	223	795	70.30952252
mgsA	83	417	49.89056837
BH1682	226	696	81.39085557
BH1683	282	1128	62.66375606
papS	574	1128	127.5496311
birA	413	972	106.5025977
BH1686	0	1215	0
panB	136	840	40.58224202
panC	153	852	45.01199379
panD	76	384	49.60880688
BH1690	233	1017	57.42637232
dinG	1180	2829	104.5503459
BH1692	741	1287	144.3165291
BH1693	78	171	114.3338707
BH1694	276	477	145.0330958
aspB	1672	1188	352.7737378
asnS	886	1293	171.7558789
dnaD	112	702	39.99054518
nth	239	657	91.18196468
BH1699	164	498	82.54502806
BH1700	1749	3618	121.1707124
BH1701	0	1215	0
ponA	2998	2661	282.3990089
BH1703	229	600	95.66666759
BH1704	25	984	6.368267892
BH1705	1	117	2.142350635
BH1706	0	525	0
BH1707	85	396	53.8022148
BH1708	396	852	116.501631
BH1709	254	612	104.0300264
BH1710	369	207	446.8198258
ilvA	1272	1248	255.4753132
BH1712	150	897	41.91555589
BH1713	450	930	121.2846891
BH1714	153	261	146.9357039
BH1715	256	339	189.28521
BH1716	221	435	127.3442767

BH1717	496	582	213.616653
BH1718	889	1143	194.9539077
BH1719	77	213	90.61237966
BH1720	152	480	79.37409101
BH1721	299	1491	50.26549447
BH1722	178	972	45.901846
BH1723	54	747	18.11964031
BH1724	4	51	19.65921759
BH1725	373	906	103.1946181
BH1726	336	1047	80.43943471
BH1727	12	810	3.713407767
gltA	1835	4593	100.1419485
gltB	650	1488	109.4931221
BH1730	89	639	34.91126316
BH1731	354	369	240.4657956
BH1732	40	252	39.78651178
BH1733	74	180	103.0470655
BH1734	77	159	121.3863954
BH1735	19	1662	2.86549065
BH1736	4	1197	0.837610774
BH1737	14	1029	3.410272439
BH1738	15	1449	2.594772508
BH1739	10	1221	2.052866701
BH1740	78	1374	14.22932452
BH1741	56	921	15.24069637
BH1742	498	888	140.5700474
BH1743	0	135	0
BH1744	1	687	0.364854475
BH1745	3	573	1.31232997
BH1746	147	849	43.39963317
BH1747	2	105	4.774381414
bioB	33	1002	8.255105589
BH1749	114	666	42.90491406
sspD	20	183	27.39399172
BH1751	2	150	3.34206699
BH1752	74	1545	12.00548336
BH1753	120	405	74.26815533
BH1754	10	1047	2.394030795
BH1755	11	1269	2.172738587
BH1756	7	672	2.610989836
BH1757	8	1269	1.580173518

BH1758	2	237	2.115232272
BH1759	75	1062	17.70162601
BH1760	38	144	66.14507584
BH1761	1	111	2.258153372
dsdA	105	1329	19.80344435
BH1763	52	915	14.24487569
BH1764	314	2295	34.2944129
BH1765	220	1293	42.64818665
BH1766	11	90	30.63561407
cotD	152	384	99.21761376
BH1768	9	570	3.957710909
BH1769	129	315	102.6492004
BH1770	122	408	74.95076705
RNase P RNA (1843317-1843710)	60319	394	38373.75738
BH1771	1290	1158	279.2270995
BH1772	254	1446	44.02930578
BH1773	471	513	230.1335603
bmrU	1034	936	276.8988195
blt	379	1230	77.234353
BH1776	18	750	6.015720582
BH1777	173	693	62.57333217
BH1778	94	426	55.30885511
BH1779	182	864	52.80001668
BH1780	74	300	61.82823931
BH1781	92	1056	21.83736954
BH1782	73	408	44.84759012
BH1783	75	396	47.47254247
BH1784	64	363	44.19262135
casA	66	333	49.67937417
BH1786	109	699	39.08640578
BH1787	49	843	14.56950912
BH1788	53	1206	11.01551931
BH1789	653	1224	133.7236363
BH1790	21	1188	4.430770631
BH1791	204	1164	43.92923105
BH1792	1340	1932	173.849758
cstA	12	1743	1.725680029
BH1794	1	264	0.949450849
BH1795	13	942	3.45914577
BH1796	70	1587	11.05598721

BH1797	21	948	5.552484714
BH1798	26	852	7.649096984
BH1799	30	801	9.387828623
BH1800	28	762	9.210420838
BH1801	171	927	46.23733457
kinA	264	1803	36.70156761
BH1803	22	624	8.837196368
BH1804	5	681	1.840345259
BH1805	218	1302	41.96835275
BH1806	236	1077	54.92533493
BH1807	189	816	58.05612694
BH1808	22	696	7.92300364
BH1809	20	1056	4.747254247
BH1810	8	873	2.296953258
BH1811	151	978	38.7003156
BH1812	285	1161	61.53030311
BH1813	46	126	91.5089771
BH1814	43	894	12.05611414
BH1815	94	996	23.65619707
BH1816	100	315	79.57302357
BH1817	25	678	9.242441897
BH1818	71	996	17.86797864
BH1819	77	759	25.42877058
BH1820	28	1158	6.060743246
BH1821	46	774	14.89681023
acoA	0	1014	0
acoB	3	1035	0.726536302
acoC	1	1233	0.203288746
acoL	12	1380	2.179608906
aciR	38	1872	5.088082757
mcpC	285	2037	35.0695542
mdmC	152	672	56.69577929
adhB	55	1137	12.12491322
BH1830	8	144	13.92527912
BH1831	257	1785	36.08870657
BH1832	132	735	45.01559619
BH1833	285	1458	48.99635248
BH1834	198	693	71.61572121
BH1835	726	651	279.5323312
BH1836	9	630	3.580786061
BH1837	38	711	13.39647106

BH1838	1	690	0.363268151
BH1839	6	1086	1.384834388
fabF	10	2295	1.092178755
BH1841	1	288	0.870329945
BH1842	1	744	0.336901914
BH1843	3	714	1.053172371
fabH	4	1110	0.903261349
BH1845	16	1845	2.173702107
BH1846	3	240	3.133187803
BH1847	7	801	2.190493345
BH1848	6	1497	1.004629356
BH1849	3	762	0.986830804
fabZ	5	471	2.660881361
BH1851	40	1209	8.292970198
BH1852	98	645	38.08401919
BH1853	1954	477	1026.79228
BH1854	4690	1338	878.603934
BH1855	62	981	15.84160194
sacP	17	1377	3.094506472
BH1857	35	960	9.138464425
sacA	40	1464	6.84849793
BH1859	93	729	31.97656688
BH1860	129	414	78.10265248
abfA	95	1503	15.84313194
BH1862	17	1200	3.550946177
BH1863	4	645	1.554449763
BH1864	12	1386	2.17017337
BH1865	5	930	1.347607657
BH1866	1	858	0.292138723
BH1867	17	984	4.330422167
BH1868	17	492	8.660844334
BH1869	75	942	19.95661021
BH1870	107	1299	20.6467187
araD	12	696	4.321638349
araB	15	1692	2.222119009
araA	11	1494	1.84551892
BH1874	10	1497	1.674382259
araR	143	1128	31.77630183
BH1876	61	267	57.2657546
BH1877	193	2277	21.24568278
BH1878	61	2346	6.517458005

BH1879	52	1668	7.814185408
BH1880	60	1086	13.84834388
BH1881	98	1527	16.08656999
BH1882	85	1338	15.92352546
BH1883	57	1098	13.01214607
BH1884	140	1602	21.90493345
BH1885	9	756	2.983988384
BH1886	6	450	3.34206699
BH1887	12	870	3.457310679
BH1888	186	588	79.2888342
BH1889	43	978	11.02061968
BH1890	68	501	34.02104121
BH1891	121	930	32.6121053
BH1892	31	453	17.15299283
BH1893	239	519	115.4268801
BH1894	3109	2091	372.6860212
BH1895	0	471	0
BH1896	183	1494	30.70272385
BH1897	40	561	17.87201599
BH1898	80	1398	14.34363515
BH1899	51	300	42.61135412
expZ	272	1617	42.16336833
BH1901	0	714	0
BH1902	1	288	0.870329945
spoIIP	11	1134	2.431397942
BH1904	1	183	1.369699586
BH1905	50	2322	5.39739501
BH1906	656	900	182.6996621
BH1907	1	711	0.352538712
BH1908	617	2781	55.61098524
BH1909	1	1794	0.13971852
BH1910	3	1521	0.494388608
lplB	0	960	0
lplC	0	894	0
BH1913	8	1656	1.210893837
BH1914	520	660	197.4857767
BH1915	7	282	6.221933226
BH1916	6	156	9.640577855
notB	43	831	12.97011557
BH1918	229	513	111.8908393
BH1919	2	72	6.962639562

BH1920	148	1647	22.52394875
BH1921	65	381	42.76266818
BH1922	116	1917	15.16744017
bglA	13	1344	2.424490562
BH1924	24	1281	4.696112866
BH1925	3	918	0.819134066
BH1926	5	858	1.460693614
BH1927	2	606	0.827244304
BH1928	84	1008	20.88791869
BH1929	0	1218	0
aprX	19	1335	3.567374877
BH1931	19	915	5.204858427
BH1932	14	1617	2.17017337
thiC	52	1788	7.289743434
gerKA	1	1548	0.16192185
gerKC	4	1200	0.835516747
gerKB	2	1122	0.4468004
BH1937	92	897	25.70820761
BH1938	59	633	23.36279057
BH1939	2	960	0.522197967
BH1940	85	1203	17.71045475
BH1941	170	414	102.9259761
BH1942	331	471	176.1503461
BH1943	2090	972	538.9598772
BH1944	1378	690	500.5835122
BH1945	3070	1389	554.0035453
BH1946	38	1218	7.820107489
BH1947	174	342	127.5262404
mgtE	639	978	163.7715342
BH1949	13	762	4.276266818
BH1950	32	888	9.032613486
BH1951	5	1227	1.021414117
BH1952	89	1092	20.42884355
BH1953	18	888	5.080845086
BH1954	0	132	0
BH1955	0	483	0
BH1956	1	1035	0.242178767
BH1957	0	1125	0
BH1958	124	1551	20.03947325
BH1959	37	432	21.46813865
BH1960	25	432	14.50549909

BH1961	100	528	47.47254247
BH1962	22	96	57.44177639
BH1963	0	1215	0
BH1964	0	627	0
BH1965	7	591	2.968841235
tetB	11	1380	1.997974831
BH1967	7	612	2.866969232
BH1968	31	462	16.81884362
BH1969	1	360	0.696263956
BH1970	4	879	1.140637198
BH1971	0	459	0
BH1972	0	309	0
BH1973	3	723	1.040062341
BH1974	8	1032	1.943062203
BH1975	0	201	0
BH1976	4	930	1.078086126
BH1977	17	3165	1.346330304
BH1978	5	474	2.64404034
BH1979	10	276	9.081703777
katB	2	2136	0.234695716
hutP	84	444	47.4212208
hutH	1	1536	0.163186865
hutU	9	1680	1.342794773
hutI	7	1281	1.369699586
hutG	6	960	1.566593902
BH1986	12	1320	2.278682039
BH1987	0	1107	0
BH1988	1	147	1.705136219
BH1989	15	1515	2.481732913
BH1990	1	537	0.466769133
BH1991	0	567	0
BH1992	1	1149	0.218150587
BH1993	0	192	0
BH1994	15	2208	1.702819458
BH1995	0	864	0
BH1996	1	780	0.321352595
BH1997	3	1179	0.637799044
BH1998	1	1230	0.203784573
BH1999	0	417	0
BH2000	1	960	0.261098984
BH2001	0	486	0

BH2002	3	1116	0.673803829
BH2003	3	585	1.285410381
BH2004	6	1098	1.369699586
BH2005	9	831	2.714675353
BH2006	12	1542	1.950622757
BH2007	0	1020	0
BH2008	1	459	0.546089377
BH2009	4	1515	0.661795444
BH2010	2	1458	0.343834052
BH2011	4	1101	0.910644956
BH2012	18	357	12.63806845
BH2013	235	2745	21.45862685
BH2014	242	5451	11.12796108
BH2015	11	582	4.737466094
BH2016	75	1014	18.5395728
BH2017	56	588	23.87190707
lacR	28	993	7.067815386
BH2019	11	1275	2.162513935
BH2020	1	1257	0.199407338
BH2021	3	852	0.882588114
lacA	10	2070	1.210893837
BH2023	6	2766	0.543720226
BH2024	176	120	367.6273689
BH2025	133	1620	20.57846804
BH2026	29	540	13.46110315
BH2027	184	1278	36.08804731
BH2028	1200	432	696.2639562
BH2029	50	1185	10.57616136
BH2030	824	1299	158.99903
BH2031	41	240	42.82023331
BH2032	82	372	55.25191395
BH2033	9	2019	1.117332946
BH2034	4	2196	0.456566529
BH2035	1	120	2.088791869
tldD	2	1299	0.385919976
BH2037	1	1260	0.198932559
BH2038	4	1728	0.580219964
BH2039	3	1257	0.598222015
BH2040	4	2457	0.408066788
BH2041	5	1131	1.108112397
BH2042	7	2472	0.709783645

BH2043	8	2565	0.781770056
BH2044	5	2292	0.546804154
BH2045	7	1677	1.046264263
BH2046	5	2490	0.503323342
BH2047	8	2472	0.811181308
BH2048	4	1917	0.523015178
BH2049	3	669	1.124013562
BH2050	2	534	0.938782862
BH2051	4	762	1.315774405
BH2052	20	510	9.829608794
BH2053	1	183	1.369699586
BH2054	1	1128	0.222211901
BH2055	55	1974	6.9838026
BH2056	0	564	0
BH2057	9	603	3.741119765
BH2058	6	726	2.071529126
BH2059	51	486	26.30330501
BH2060	7	705	2.48877329
BH2061	95	450	52.91606067
BH2062	89	546	40.8576871
BH2063	3	345	2.179608906
qoxA	149	990	37.72484708
qoxB	291	1944	37.52089097
qoxC	120	615	48.90829741
qoxD	147	411	89.65033714
BH2068	9	282	7.999628433
BH2069	72	837	21.56172252
BH2070	15	1857	2.024677094
BH2071	2	834	0.601091185
BH2072	1	795	0.315289339
BH2073	0	1311	0
BH2074	10	1461	1.715640139
BH2075	1	933	0.268654903
BH2076	1	882	0.28418937
BH2077	5	825	1.519121359
BH2078	3	735	1.023081732
BH2079	6	1179	1.275598088
wprA	3997	3159	317.1472402
BH2081	9	426	5.295528681
BH2082	17	1503	2.835086768
BH2083	3	318	2.36467004

BH2084	1	828	0.302723459
BH2085	7	423	4.147955484
BH2086	7	330	5.316924757
BH2087	9	231	9.765780165
BH2088	10	594	4.219781553
BH2089	21	1113	4.72934008
BH2090	28	1116	6.288835734
BH2091	42	555	18.96848832
BH2092	12	489	6.15104354
BH2093	0	1173	0
BH2094	22	699	7.888999332
BH2095	192	615	78.25327586
BH2096	145	1206	30.13679811
BH2097	52	633	20.59093406
BH2098	21	933	5.641752957
BH2099	18	1260	3.580786061
BH2100	99	1101	22.53846267
gdhA	882	1377	160.550277
gltC	46	906	12.72641403
BH2103	122	567	53.93282709
BH2104	149	612	61.02548793
BH2105	5	1167	1.073928981
BH2106	0	111	0
BH2107	1	552	0.454085189
BH2108	2	645	0.777224881
BH2109	11	1578	1.747278369
BH2110	14	1758	1.996115096
BH2111	3	1686	0.446005381
BH2112	0	1014	0
BH2113	1	927	0.270393769
BH2114	2	2115	0.237026028
BH2115	1	210	1.193595354
BH2116	3	861	0.873362454
BH2117	11	873	3.158310729
BH2118	22	1068	5.163305743
BH2119	9	486	4.641759708
BH2120	9	1191	1.894118571
BH2121	41	546	18.82208057
BH2122	67	780	21.53062388
BH2123	12	672	4.475982576
BH2124	3	396	1.898901699

sinR	99	339	73.20013982
BH2126	22	132	41.77583737
BH2127	30	585	12.85410381
BH2128	14	615	5.705968032
cotN	78	633	30.88640109
sipW	54	576	23.49890852
BH2131	40	825	12.15297087
BH2132	0	231	0
BH2133	27	2184	3.098757168
BH2134	10	1125	2.22804466
BH2135	14	1356	2.587883731
BH2136	8	1326	1.512247507
BH2137	307	756	101.7871593
BH2138	88	480	45.95342111
BH2139	1264	2451	129.2647697
BH2140	750	1968	95.52401838
BH2141	224	414	135.6201097
BH2142	156	639	61.19277587
BH2143	0	126	0
BH2144	6	774	1.943062203
BH2145	20	582	8.613574716
BH2146	97	2472	9.835573362
BH2147	52	177	73.63876418
BH2148	137	324	105.9868467
BH2149	388	1518	64.0672921
BH2150	13	312	10.44395934
BH2151	5	267	4.693914312
BH2152	17	498	8.556496811
BH2153	7	453	3.873256445
BH2154	1	270	0.928351942
BH2155	901	804	280.8957423
bcaT	848	1077	197.3588306
BH2157	136	543	62.77915893
BH2158	407	831	122.7636521
BH2159	8	150	13.36826796
BH2160	28	384	18.27692885
BH2161	104	1434	18.17860706
BH2162	121	819	37.03206097
BH2163	259	1395	46.53738443
BH2164	38	462	20.61664702
BH2165	81	1047	19.39164944

kduI	58	831	17.4945745
kduD	83	753	27.62864145
BH2168	27	780	8.67652007
BH2169	106	714	37.21209043
BH2170	18	630	7.161572121
BH2171	16	1368	2.93163771
BH2172	7	357	4.914804397
BH2173	63	336	46.99781705
BH2174	122	615	49.7234357
BH2175	147	984	37.44541521
BH2176	57	438	32.61948946
BH2177	15	336	11.18995644
BH2178	280	1152	60.92309617
clpE	102	2136	11.96948149
BH2180	77	912	21.16275972
BH2181	110	831	33.17936542
BH2182	257	255	252.620946
isp	39	969	10.08828271
BH2184	1	165	1.519121359
BH2185	0	90	0
BH2186	12	1110	2.709784046
BH2187	5	1077	1.16367235
gerAA	2	1233	0.406577493
BH2189	117	795	36.88885262
BH2190	41	846	12.14758392
cotW	4	210	4.774381414
cotX	15	483	7.784317523
BH2193	247	780	79.37409101
BH2194	344	873	98.76899008
BH2195	237	1212	49.01422504
BH2196	41	108	95.15607402
BH2197	211	381	138.8141998
BH2198	21	267	19.71444011
BH2199	0	69	0
BH2200	39	999	9.785331277
BH2201	20	564	8.888476037
BH2202	27	633	10.69144653
BH2203	175	204	215.0226924
BH2204	0	1215	0
BH2205	1435	1236	291.0112943
BH2206	3353	2838	296.140344

BH2207	22	462	11.93595354
BH2208	3	843	0.892010762
BH2209	10	1836	1.365223444
BH2210	19	735	6.479517633
BH2211	21	1011	5.206484183
BH2212	7	348	5.041911407
BH2213	32	654	12.26446602
BH2214	62	1437	10.81462178
BH2215	31	969	8.018891384
BH2216	3774	1413	669.4777505
BH2217	77	279	69.17719307
BH2218	52	813	16.03205567
degA	124	1008	30.83454663
BH2220	10	1038	2.414788287
BH2221	6	1038	1.448872972
BH2222	6	1743	0.862840015
BH2223	13	2247	1.450162579
amyC	3	831	0.904891784
amyD	8	915	2.191519338
msmE	12	1275	2.359106111
msmR	22	1044	5.282002427
melA	39	1305	7.490839805
BH2229	3	864	0.870329945
BH2230	940	3276	71.9217713
BH2231	332	1449	57.43096484
BH2232	122	1035	29.54580962
BH2233	183	1374	33.38418445
BH2234	77	945	20.42374272
BH2235	7	195	8.997872665
BH2236	374	642	146.0202166
gapN	766	1446	132.7812922
BH2238	173	483	89.77912877
BH2239	218	633	86.32353126
BH2240	13	615	5.298398886
BH2241	305	498	153.5136193
BH2242	397	711	139.9578687
BH2243	222	423	131.5494453
BH2244	347	672	129.4304961
BH2245	573	1233	116.4844517
BH2246	4	231	4.34034674
BH2247	12	633	4.751754014

BH2248	58	1158	12.55439672
BH2249	51	531	24.07421137
BH2250	160	1338	29.97369498
BH2251	36	228	39.57710909
BH2252	65	288	56.57144644
BH2253	38	522	18.24691747
BH2254	0	114	0
BH2255	19	1407	3.384822644
BH2256	2	273	1.836300544
BH2257	29	807	9.00742962
BH2258	11	672	4.102984028
BH2259	4	678	1.478790703
BH2260	4	1338	0.749342374
BH2261	194	213	228.2961254
cheV	1345	918	367.2451063
BH2263	93	1422	16.39305011
BH2264	41	696	14.76559769
BH2265	196	1266	38.80599111
BH2266	5	267	4.693914312
BH2267	156	999	39.14132511
BH2268	45	324	34.81319781
BH2269	627	738	212.9548783
BH2270	131	786	41.77583737
BH2271	120	933	32.23858833
BH2272	77	435	44.36882038
BH2273	95	330	72.15826455
BH2274	161	309	130.6001906
BH2275	966	2016	120.1055324
BH2276	391	1179	83.12647538
BH2277	804	1218	165.4570111
BH2278	119	630	47.34594902
BH2279	7	858	2.04497106
BH2280	53	912	14.56657487
BH2281	2	222	2.258153372
BH2282	13	411	7.928261107
BH2283	582	873	167.1033495
BH2284	270	483	140.1177154
nadE	388	819	118.7474352
BH2286	66	318	52.02274088
BH2287	145	231	157.3375693
BH2288	361	432	209.4594068

spoVK	1131	2328	121.7744126
BH2290	2584	1608	402.7938947
BH2291	824	570	362.350421
BH2292	63	1281	12.32729627
BH2293	26	639	10.19879598
BH2294	56	492	28.52984016
BH2295	1	141	1.777695207
BH2296	0	138	0
BH2297	1	699	0.358590879
BH2298	0	150	0
citB	6004	2724	552.4716467
cotK	16	162	24.75605178
BH2301	19	138	34.51047435
BH2302	832	489	426.4723521
BH2303	5	822	1.524665598
BH2304	10	948	2.64404034
BH2305	18	1509	2.989920766
BH2306	17	837	5.090962261
BH2307	88	339	65.06679095
BH2308	1	1413	0.177392091
BH2309	1	1317	0.190322722
iolH	23	885	6.51419837
BH2311	46	1176	9.804533261
BH2312	106	1458	18.22320478
BH2313	63	1014	15.57324115
BH2314	39	867	11.2751395
iolI	18	849	5.314240797
iolG	12	1047	2.872836954
iolE	13	912	3.57293346
iolD	29	1914	3.797803398
iolC	19	996	4.781571748
iolB	6	813	1.849852577
BH2321	2	975	0.514164152
BH2322	0	1569	0
BH2323	13	972	3.352382011
BH2324	5	255	4.914804397
BH2325	1314	540	609.9272257
BH2326	889	366	608.831466
BH2327	538	195	691.5507848
BH2328	533	327	408.5600242
ald	10256	1137	2260.965636

BH2330	162	420	96.68122364
BH2331	157	798	49.31433434
BH2332	435	456	239.1117008
BH2333	166	510	81.58575299
BH2334	5	156	8.03381488
BH2335	112	1800	15.59631262
BH2336	80	1758	11.40637198
BH2337	18	342	13.1923697
BH2338	35	444	19.758842
BH2339	37	318	29.16426383
BH2340	10	456	5.496820707
BH2341	119	816	36.5538577
BH2342	0	285	0
BH2343	0	786	0
BH2344	379	900	105.5536158
BH2345	139	264	131.9736681
BH2346	136	405	84.17057604
BH2347	15	525	7.161572121
BH2348	4	390	2.570820761
BH2349	7	672	2.610989836
BH2350	663	219	758.8323337
BH2351	8	441	4.547029918
tkr	3284	2001	411.3698649
BH2353	157	240	163.9701617
BH2354	129	654	49.44112863
BH2355	31	204	38.08973408
lexA	414	624	166.299968
BH2357	10	249	10.06646684
BH2358	1	513	0.488606285
BH2359	0	189	0
glnA	4471	1350	830.1323062
BH2361	489	1278	95.90790834
BH2362	339	1257	67.59908768
BH2363	59	948	15.59983801
BH2364	83	1137	18.29759632
BH2365	379	237	400.8365156
miaA	574	945	152.2497184
BH2367	706	771	229.5232777
mulT	1273	1914	166.7104733
mutS	1124	2598	108.4435132
cotE	46	564	20.44349488

BH2371	596	441	338.7537289
BH2372	1332	1617	206.4764949
BH2373	891	867	257.5935716
BH2374	932	1740	134.258898
spoVS	457	261	438.8863834
BH2376	778	795	245.2951055
BH2377	0	1215	0
BH2378	16080	1566	2573.775728
BH2379	229	666	86.18618701
BH2380	72	252	71.61572121
BH2381	422	1413	74.8594623
BH2382	255	999	63.98101219
recA	1832	1050	437.3333375
BH2384	3863	1620	597.7039251
cinA	3845	1263	763.0788347
pgsA	1175	579	508.6695224
BH2387	1212	495	613.7250291
BH2388	909	852	267.4241984
BH2389	723	774	234.1389955
BH2390	135	255	132.6997187
BH2391	296	729	101.7748795
BH2392	512	1299	98.79551379
BH2393	624	1296	120.6857524
BH2394	364	729	125.1555951
spoIIIE	979	2370	103.5406197
BH2396	13	222	14.67799692
BH2397	43	771	13.97946309
BH2398	5398	1668	811.1725545
dapA	1035	879	295.139875
dapG	2464	1236	499.6876859
asd	1139	1050	271.9010215
spoVFB	5	594	2.109890776
spoVFA	11	879	3.136752294
BH2404	11	249	11.07311352
BH2405	1274	1242	257.1131247
BH2406	1270	972	327.501935
pnpA	9318	2115	1104.304263
rpsO	15541	270	14427.51752
ribC	499	942	132.7779799
truB	594	915	162.7203108
rbfA	701	351	500.5959316

BH2412	855	282	759.9647012
infB	6371	2193	728.1911352
BH2414	668	306	547.1815562
BH2415	674	276	612.1068346
nusA	2318	1149	505.6730602
BH2417	649	471	345.3824007
polC	4050	4302	235.9723032
proS	2846	1710	417.1720462
BH2420	1317	1263	261.3718661
BH2421	788	1098	179.8872123
cdsA	246	795	77.56117731
uppS	658	771	213.9182957
frr	2393	558	1074.941708
smbA	3299	720	1148.487396
tsf	10479	882	2978.020407
rpsB	17225	735	5874.194276
BH2428	277	501	138.585712
BH2429	244	312	196.0250831
BH2430	1282	1383	232.3497766
sigD	631	771	205.1404933
BH2432	341	324	263.8066767
cheD	586	489	300.3759595
cheC	621	630	247.0742382
cheB	1158	1041	278.8266264
BH2436	916	867	264.8212252
flhF	916	1128	203.5461012
flhA	1618	2034	199.3902799
flhB	453	1092	103.9805183
fliR	303	777	97.74578165
fliQ	106	270	98.40530581
fliP	821	702	293.1449785
fliZ	1195	687	436.0010975
cheY	976	366	668.413398
fliY	2263	1206	470.3418904
fliM	1180	993	297.8579341
fliL	450	432	261.0989836
BH2448	221	213	260.0692975
flgE	1228	792	388.641881
BH2450	476	399	299.0270465
BH2451	1119	516	543.5716514
BH2452	3265	1197	683.6997946

BH2453	964	570	423.9148129
fliJ	651	441	370.0145596
fliI	1680	1314	320.4721771
fliH	1085	801	339.5264685
fliG	1317	1008	327.4927251
fliF	2117	1578	336.2716643
fliE	202	309	163.8586243
flgC	403	459	220.0740191
flgB	225	399	141.3468182
codY	963	780	309.4625492
clpY	1620	1395	291.083254
clpQ	442	543	204.0322665
codV	589	912	161.8813698
gid	736	1308	141.0413592
topA	2579	2073	311.837582
smf	138	909	38.053238
sucD	2663	909	734.3171942
sucC	3045	1161	657.4027122
BH2471	2	186	2.695215314
BH2472	0	1215	0
BH2473	104	279	93.4341309
BH2474	875	1728	126.923117
rnh	308	792	97.47695387
BH2476	883	855	258.8636098
BH2477	0	1215	0
rplS	9154	345	6650.71331
trmD	1103	741	373.1072763
BH2480	509	522	244.4126577
BH2481	472	417	283.7150394
BH2482	14066	231	15262.82931
rpsP	5033	273	4621.050319
ffh	8281	1356	1530.733227
BH2485	2167	330	1645.967993
ftsY	592	993	149.433811
smc	1362	3567	95.70847856
BH2488	24	222	27.09784046
rncS	948	792	300.0264684
acpA	2851	234	3053.92083
fabG	4163	741	1408.200899
fabD	4041	942	1075.262158
plsX	3453	1014	853.5619317

BH2494	1721	561	768.9434879
recG	737	2022	91.36140102
BH2496	259	888	73.1077154
BH2497	221	663	83.55167475
BH2498	2825	1674	422.9990702
BH2499	263	363	181.6040534
rpmB	9395	189	12459.80927
BH2501	6	81	18.56703883
rpe	296	651	113.9691047
BH2503	337	885	95.44716742
BH2504	2285	1995	287.0910929
BH2505	944	750	315.4911238
BH2506	813	1089	187.128131
BH2507	767	1353	142.0934247
fmt	339	954	89.06923817
priA	836	2415	86.76919266
dfp	523	1215	107.8951257
rpoZ	402	207	486.7793224
gmk	976	615	397.7874856
BH2513	761	264	722.5320964
BH2514	792	885	224.3150047
pacL	326	2709	30.16372754
BH2516	245	1713	35.8496678
BH2517	6	354	4.248390241
BH2518	15	450	8.355167475
BH2519	128	666	48.17393859
BH2520	236	567	104.3290753
BH2521	335	522	160.860983
BH2522	301	306	246.5593539
BH2523	716	1659	108.1790219
BH2524	0	945	0
BH2525	10	324	7.73626618
narA	212	1017	52.25060486
narQ	138	813	42.54660928
BH2528	40	1260	7.957302357
BH2529	12	249	12.0797602
BH2530	300	2349	32.01213592
BH2531	162	663	61.24602402
pyrE	30	633	11.87938504
pyrF	54	705	19.19910824
pyrD	56	918	15.29050257

pyrDII	32	780	10.28328305
pyrAB	102	3189	8.017187981
pyrAA	37	1089	8.516286407
pyrC	32	1287	6.232292755
pyrB	15	918	4.095670331
pyrP	49	1335	9.200072051
pyrR	269	543	124.1734835
BH2542	384	918	104.8491605
lsp	170	471	90.46996629
BH2544	20	663	7.561237534
ileS	3905	2766	353.8712472
divIVA	1247	498	627.6442073
BH2547	3161	777	1019.717544
BH2548	934	255	918.0854613
BH2549	1256	450	699.6060232
BH2550	1575	687	574.6457979
BH2551	1336	822	407.3906477
BH2552	0	282	0
BH2553	31	798	9.737225253
sigG	11	786	3.507894741
BH2555	0	87	0
sigE	4	714	1.404229828
spoIIIGA	7	918	1.911312821
ftsZ	3516	1149	767.0174632
ftsA	3500	1278	686.4574216
sbp	224	354	158.606569
BH2561	881	708	311.9026502
BH2562	673	723	233.3206519
divIB	501	789	159.1611751
murB	676	906	187.0229541
murG	755	1092	173.3008638
spoVE	876	1101	199.4312454
murD	1903	1353	352.5473105
mraY	358	744	120.6108853
BH2569	110	294	93.78249206
murF	911	1359	168.0255534
murE	711	1461	121.9820139
spoVD	881	1935	114.1225201
pbpB	1309	2172	151.0623512
BH2574	317	363	218.8915776
BH2575	684	933	183.7599535

BH2576	302	432	175.226429
BH2577	317	1617	49.13892559
BH2578	34	387	22.02137164
apbA	168	927	45.42615326
BH2580	202	510	99.27904882
BH2581	146	642	57.00254445
BH2582	112	756	37.13407767
rpmF	3098	174	4462.811868
BH2584	1950	510	958.3868574
BH2585	239	1251	47.88693109
BH2586	261	1050	62.30567745
BH2587	162	828	49.0412004
BH2588	171	1236	34.67800093
kdtB	155	498	78.01511799
BH2590	190	570	83.55167475
BH2591	31	390	19.9238609
BH2592	205	1230	41.77583737
BH2593	5	324	3.86813309
BH2594	105	279	94.33253601
BH2595	68	315	54.10965603
BH2596	616	444	347.7556192
BH2597	19	969	4.914804397
BH2598	58	774	18.78293463
BH2599	21	435	12.10058738
BH2600	1	234	1.071175317
BH2601	1	420	0.596797677
BH2602	371	507	183.4181736
BH2603	258	1293	50.01469161
BH2604	94	1092	21.57653139
BH2605	10	429	5.842774458
BH2606	588	351	419.9007244
BH2607	3	54	13.92527912
BH2608	186	1059	44.02439519
BH2609	81	297	68.36046116
BH2610	74	198	93.67915047
BH2611	466	558	209.3283894
ctaF	898	345	652.4295993
ctaE	2370	621	956.6061312
ctaD	5024	1863	675.9478485
ctaC	3316	1047	793.8606116
ctaB	1551	939	414.0212381

ctaA	213	897	59.52008937
BH2618	11	1806	1.526691731
BH2619	10	1206	2.078399869
BH2620	5	1293	0.969276969
BH2621	2	594	0.843956311
BH2622	24	1797	3.347646401
ddc	12	1527	1.96978408
BH2624	6	1365	1.101780326
pycA	4696	3453	340.8850257
BH2626	667	282	592.8613517
BH2627	5	927	1.351968847
BH2628	67	510	32.92918946
BH2629	46	1329	8.675794669
BH2630	171	456	93.99563409
BH2631	1477	342	1082.507225
BH2632	5185	1845	704.4153391
BH2633	91	186	122.6322968
BH2634	455	900	126.72004
BH2635	325	804	101.3219936
BH2636	2	189	2.652434119
BH2637	182	642	71.05796637
BH2638	83	267	77.91897757
BH2639	325	978	83.29538127
cad	216	1476	36.68122306
BH2641	0	1215	0
BH2642	125	411	76.23327988
BH2643	277	1089	63.7570631
BH2644	1016	1065	239.1225396
opuD	760	1515	125.7411343
slp	94	468	50.34523991
BH2647	30	372	20.21411486
BH2648	47	690	17.0736031
BH2649	43	825	13.06444369
BH2650	67	1161	14.46501863
BH2651	0	1215	0
pdhD	7678	1410	1364.91438
pdhC	7324	1281	1433.09711
pdhB	4941	978	1266.346089
pdhA	5354	1086	1235.733886
BH2656	2	645	0.777224881
BH2657	0	213	0

BH2658	207	549	94.50927144
BH2659	339	774	109.7830145
BH2660	0	138	0
BH2661	39	210	46.55021879
BH2662	1351	1668	203.0185478
BH2663	385	663	145.5538225
BH2664	1023	450	569.8224218
BH2665	4141	552	1880.366767
BH2666	72	831	21.71740282
BH2667	214	249	215.4223903
BH2668	562	1116	126.2259172
BH2669	1789	723	620.2238428
BH2670	93	897	25.98764465
BH2671	20	1281	3.913427389
BH2672	2	552	0.908170378
BH2673	38	1047	9.097317021
BH2674	104	897	29.06145209
BH2675	15	864	4.351649726
gntK	30	1503	5.003094296
BH2677	39	1284	7.61335354
BH2678	157	1284	30.64862835
tenA	36	675	13.36826796
BH2680	43	750	14.37088806
BH2681	30	753	9.986255946
BH2682	61	993	15.39774066
BH2683	192	1140	42.21558303
BH2684	0	333	0
BH2685	2	456	1.099364141
BH2686	5	159	7.882233467
BH2687	15	543	6.92417194
BH2688	61	1146	13.34202136
BH2689	252	840	75.19650727
BH2690	249	750	83.21746805
BH2691	5	144	8.703299453
BH2692	291	801	91.06193765
BH2693	10	390	6.427051904
BH2694	24	1257	4.785776119
BH2695	20	1389	3.609143618
BH2696	0	1356	0
BH2697	10	402	6.235199608
BH2698	81	1569	12.94012553

BH2699	60	756	19.89325589
BH2700	88	1032	21.37368424
BH2701	108	696	38.89474514
BH2702	3469	915	950.2975728
BH2703	80	990	20.25495145
BH2704	3	303	2.481732913
BH2705	27	525	12.89082982
opuE	35	1524	5.756513024
BH2707	13	171	19.05564512
BH2708	166	1581	26.31798484
BH2709	38	303	31.43528357
BH2710	90	435	51.85966019
BH2711	0	42	0
BH2712	17	891	4.782419093
BH2713	17	1344	3.170487658
BH2714	10	1413	1.773920908
BH2715	8	939	2.135506064
BH2716	6	1314	1.14454349
BH2717	0	975	0
BH2718	1	1293	0.193855394
BH2719	2	783	0.640242718
BH2720	6	888	1.693615029
BH2721	1	348	0.720273058
BH2722	6	573	2.62465994
BH2723	50	3045	4.115846047
BH2724	2	819	0.612100181
BH2725	2	873	0.574238314
BH2726	3	1278	0.588392076
BH2727	13	1794	1.816340755
BH2728	6	1533	0.981037277
BH2729	31	1005	7.731647514
BH2730	43	1413	7.627859903
BH2731	9	1116	2.021411486
BH2732	1	426	0.588392076
BH2733	0	291	0
BH2734	27	1725	3.923296032
BH2735	8	189	10.60973648
trnM-Val	818	73	2808.709724
BH2736	125	69	454.0851888
BH2737	4085	1548	661.4507584
BH2738	74	393	47.19712925

BH2739	220	1581	34.87925701
BH2740	47	921	12.79129874
BH2741	50	1230	10.18922863
BH2742	54	297	45.57364077
BH2743	148	510	72.73910507
BH2744	102	327	78.18597086
BH2745	199	543	91.86068108
BH2746	151	573	66.05394182
BH2747	188	909	51.84064308
BH2748	19	597	7.977295579
BH2749	49	1218	10.08382281
BH2750	133	1047	31.84060957
BH2751	88	693	31.82920943
BH2752	242	1599	37.93528197
trnN-Arg	558	75	1864.87338
BH2753	241	363	166.4128398
BH2754	627	1605	97.91943938
BH2755	94	1047	22.50388947
xylB	151	1497	25.28317212
xylA	140	1323	26.52434119
xylR	55	1161	11.87426902
BH2759	418	438	239.2095893
BH2760	281	1143	61.62210132
bfmBB	977	1281	191.1709279
bfmBAB	488	984	124.3085893
bfmBAA	542	993	136.8127121
BH2764	728	1425	128.0539352
BH2765	482	1095	110.3339924
BH2766	828	2046	101.4381037
BH2767	9	258	8.743779915
BH2768	18	798	5.653872727
BH2769	17	669	6.369410183
BH2770	7	459	3.822625642
BH2771	11	1140	2.418601111
BH2772	10	198	12.65934466
spo0A	211	804	65.78135586
BH2774	0	1380	0
spoIVB	80	1314	15.26057986
recN	1371	1698	202.3840037
ahrC	449	450	250.0980131
BH2778	767	819	234.7404195

BH2779	3181	1890	421.8696466
BH2780	339	603	140.9155111
OLE RNA (2908358-2908965)	28211	608	11630.31067
BH2781	623	885	176.449808
BH2782	240	243	247.5605178
BH2783	1234	1377	224.6247639
folD	694	840	207.0887938
nusB	190	405	117.5912459
BH2786	799	399	501.9382566
accC	3751	1359	691.8373774
accB	1163	510	571.5917514
BH2789	271	354	191.8856259
spoIIAH	13	636	5.123451753
spoIIAG	13	666	4.892665638
spoIIAF	10	651	3.850307592
spoIIAE	6	1194	1.259572986
spoIIAD	5	324	3.86813309
spoIIAC	1	207	1.210893837
spoIIAB	4	513	1.95442514
spoIIAA	5	930	1.347607657
BH2798	0	282	0
efp	1032	558	463.5770341
BH2800	1557	1068	365.4212292
BH2801	832	438	476.1300917
BH2802	1	480	0.522197967
BH2803	186	978	47.67058743
BH2804	124	411	75.62341364
BH2805	44	891	12.37802589
BH2806	27	966	7.005885771
BH2807	465	420	277.5109197
spIB	156	1032	37.88971297
BH2809	5	594	2.109890776
BH2810	2169	2559	212.4543758
BH2811	483	852	142.0966863
BH2812	222	831	66.96199204
BH2813	187	378	124.0012951
BH2814	286	1467	48.86662368
BH2815	211	1344	39.35134681
BH2816	100	1098	22.82832643
BH2817	7	1701	1.031502157
BH2818	17	801	5.319769553

BH2819	550	189	729.4193827
BH2820	52	636	20.49380701
BH2821	544	246	554.2940373
BH2822	6	207	7.265363022
BH2823	14	384	9.138464425
comGD	16	459	8.737430039
BH2825	14	327	10.73140777
BH2826	40	417	24.04364741
comGC	21	309	17.03480747
BH2829	7	228	7.69554899
BH2828	30	228	32.98092424
trnO-Gly1	106	71	374.2173601
trnO-Arg	156	77	507.8205686
trnO-Gly2	229	75	765.3333407
trnO-Gln	194	75	648.360996
trnO-His	197	76	649.7242076
trnO-Tyr	362	85	1067.495515
trnO-Met	283	77	921.2385956
trnO-Ser	488	93	1315.265073
trnO-Ala	410	76	1352.217894
bsaA	16	474	8.460929088
comGB	9	972	2.320879854
comGA	44	1047	10.5337355
trnP-Gln	8	72	27.85055825
BH2833	2	186	2.695215314
BH2834	209	2343	22.35889888
BH2835	127	648	49.12529024
BH2836	7	720	2.436923847
BH2837	8	690	2.906145209
BH2838	12	744	4.042822972
cgeB	2	804	0.623519961
BH2840	0	351	0
BH2841	1	1722	0.145560409
BH2842	0	471	0
BH2843	1816	783	581.3403883
BH2844	837	2061	101.7943985
BH2845	40	741	13.53063559
BH2846	179	441	101.7397944
BH2847	578	909	159.3824027
BH2848	482	798	151.3981475
BH2849	257	636	101.2867

BH2850	301	381	198.024048
BH2851	38	579	16.45058881
BH2852	696	699	249.5792516
BH2853	122	1845	16.57447857
BH2854	133	393	84.82727284
BH2855	165	921	44.90562324
BH2856	1412	1797	196.9531966
BH2857	14	1218	2.881092233
BH2858	253	1512	41.94161451
mecA	313	639	122.7778131
BH2860	126	672	46.99781705
BH2861	357	396	225.9693022
BH2862	8	126	15.91460471
BH2863	6	168	8.951965152
BH2864	67	228	73.65739747
BH2865	564	648	218.1627063
BH2866	140	540	64.98463591
BH2867	2	993	0.504843956
BH2868	15	555	6.774460115
BH2869	51	180	71.01892354
trpS	292	993	73.7072176
BH2871	374	123	762.1543014
BH2872	20	747	6.710977891
BH2873	6	882	1.705136219
BH2874	5	225	5.57011165
BH2875	66	951	17.39561682
BH2876	37	198	46.83957524
dacB	128	1188	27.00660194
BH2878	12	774	3.886124407
BH2879	45	588	19.18278247
BH2880	37	651	14.24613809
BH2881	105	1284	20.4974903
BH2882	4602	1236	933.2640951
BH2883	1855	939	495.1704686
BH2884	27	300	22.55895218
BH2885	89	255	87.48351826
BH2886	148	330	112.4149806
BH2887	478	786	152.4339715
BH2888	432	237	456.8901708
med	437	873	125.4710717
BH2890	9	174	12.96491505

BH2891	14	906	3.873256445
BH2892	5	747	1.677744473
BH2893	32	180	44.5608932
argf	62	960	16.18813698
carB	127	3144	10.12505982
carA	49	1080	11.37231129
argD	69	1155	14.97419625
argB	76	783	24.3292233
argJ	86	1236	17.44039813
argC	79	1038	19.07682747
BH2901	0	315	0
BH2902	19	330	14.43165291
BH2903	155	1686	23.04361136
BH2904	218	606	90.16962918
BH2905	180	915	49.3091851
BH2906	215	810	66.53188915
BH2907	335	456	184.1434937
BH2908	35	609	14.40546116
BH2909	112	570	49.25151354
BH2910	180	714	63.19034225
BH2911	29	309	23.52425794
BH2912	339	1548	54.89150725
BH2913	773	2988	64.84482388
BH2914	85	183	116.4244648
BH2915	575	507	284.2734496
BH2916	770	882	218.8258148
BH2917	574	780	184.4563896
BH2918	45	255	44.23323957
BH2919	6	129	11.65837322
BH2920	309	372	208.205383
BH2921	548	1086	126.4815408
BH2922	0	1215	0
BH2923	407	1035	98.56675833
BH2924	33	843	9.812118387
BH2925	5	1293	0.969276969
BH2926	113	1290	21.9566029
BH2927	68	1737	9.812631922
BH2928	44	600	18.38136844
BH2929	26	633	10.29546703
BH2930	81	756	26.85589545
BH2931	16	270	14.85363107

BH2932	17	633	6.73165152
BH2933	100	810	30.94506472
BH2934	44	729	15.12869831
BH2935	11	1185	2.326755499
BH2936	219	1359	40.3925315
BH2937	11921	1041	2870.373241
BH2938	1349	1965	172.078182
BH2939	31	738	10.52886958
BH2940	309	855	90.58760525
BH2941	63	1386	11.39341019
BH2942	0	156	0
BH2943	40	1182	8.482403528
BH2944	94	765	30.79944089
BH2945	18	1971	2.289086979
BH2946	5	489	2.562934808
BH2947	16	1008	3.978651178
atoC	33	1362	6.073139354
BH2949	51	2004	6.378945228
BH2950	0	69	0
BH2951	155	573	67.80371511
BH2952	197	1779	27.75662719
BH2953	153	756	50.72780253
BH2954	75	1023	18.37646805
mutA	116	2151	13.51742576
mutB	14	2046	1.715137018
mmdA	18	1551	2.908955794
BH2958	19	648	7.349452871
BH2959	15	186	20.21411486
BH2960	57	294	48.59638225
BH2961	50	777	16.12966694
BH2962	24	222	27.09784046
BH2963	18	360	12.53275121
BH2964	23	834	6.91254863
BH2965	0	1173	0
BH2966	1	126	1.989325589
BH2967	0	1326	0
BH2968	1151	363	794.7766747
cheW	963	468	515.7709153
cheA	4342	2049	531.1586702
BH2971	323	1632	49.60880688
BH2972	144	831	43.43480564

phnD	2759	942	734.1371676
phnC	444	777	143.2314424
BH2975	394	792	124.6945449
phnE	261	801	81.67410902
BH2977	0	60	0
BH2978	0	1215	0
BH2979	14	300	11.69723446
BH2980	812	3390	60.03890256
BH2981	563	2868	49.20459507
BH2982	93	468	49.80965225
BH2983	391	375	261.3496386
rocF	69	903	19.15304172
BH2985	6	75	20.05240194
BH2986	8	384	5.221979672
BH2987	44	405	27.23165695
BH2988	4	483	2.075818006
BH2989	1	447	0.560749495
BH2990	93	651	35.80786061
BH2991	17	837	5.090962261
BH2992	9	885	2.549034145
BH2993	9	957	2.357257281
BH2994	17	1008	4.227316877
BH2995	27	1272	5.32050759
BH2996	9	309	7.300631774
BH2997	17	294	14.49365786
arsC	36	420	21.48471636
arsB	84	1311	16.06027615
arsR	37	351	26.42232449
BH3001	120	561	53.61604797
BH3002	300	735	102.3081732
BH3003	72	177	101.9613658
BH3004	21	318	16.55269028
BH3005	3	1167	0.644357389
BH3006	9	1080	2.088791869
BH3007	12	1011	2.975133819
BH3008	234	1149	51.04723731
rpmA	10966	285	9644.50174
BH3010	11187	342	8199.057767
rplU	8252	309	6693.868155
BH3012	244	171	357.6598007
BH3013	699	339	516.8373509

cafA	754	1503	125.7444366
spoIVFB	36	870	10.37193204
spoIVFA	69	783	22.08837378
mobA	62	597	26.03117505
moaD	67	237	70.86028111
moaE	241	471	128.2544816
mobB	151	510	74.21354639
moeA	358	1272	70.54598953
moaB	131	513	64.00742334
moaC	49	498	24.66284375
BH3024	93	381	61.18350985
BH3025	51	516	24.77404309
BH3026	87	1578	13.81938347
minD	1313	795	413.9749017
minC	1174	699	420.9856916
mreD	550	525	262.5909778
mreC	1410	882	400.7070115
mreB	1973	1041	475.0647097
BH3032	395	699	141.6433971
maf	333	573	145.6686267
spoIIB	799	1059	189.1155471
comC	274	489	140.4488275
BH3036	1096	1704	161.2194287
folC	1056	1293	204.7112959
valS	5300	2643	502.6377709
BH3039	0	186	0
BH3040	5	1026	1.221515713
BH3041	10	870	2.881092233
spoVID	9	1251	1.803273556
hemL	876	1290	170.212249
hemB	492	987	124.9465774
hemD	385	762	126.6432865
hemC	1155	936	309.3018729
hemX	328	816	100.7534901
hemA	790	1380	143.4909197
BH3049	735	585	314.9255433
lonA	1942	2325	209.3643256
lonB	53	1671	7.950159357
clpX	2589	1275	508.9771433
tig	6370	1296	1232.000389
BH3054	440	1062	103.8495392

leuD	511	585	218.9482349
leuC	1721	1419	304.0009138
leuB	799	1092	183.4005168
leuA	1301	1548	210.6603272
ilvC	1449	1023	355.0333628
ilvN	522	522	250.6550242
BH3061	721	807	223.9433364
ilvD	2590	1668	389.2065424
BH3063	0	351	0
BH3064	8856	648	3425.618665
BH3065	9	213	10.59105736
trnQ-Arg	1792	77	5833.426019
trnQ-Gly	3402	74	11523.35666
BH3066	530	510	260.484633
BH3067	665	585	284.9326344
rph	704	774	227.9859652
BH3069	18	129	34.97511966
gerM	29	1098	6.620214666
BH3071	607	603	252.3177441
BH3072	234	456	128.6256045
ptsI	7658	1719	1116.64699
ptsH	1904	264	1807.754417
gerE	14	225	15.59631262
paiA	9	477	4.72934008
BH3077	9	453	4.979901144
BH3078	3	639	1.176784151
BH3079	4	150	6.68413398
BH3080	8	108	18.56703883
BH3081	10	351	7.141168782
BH3082	35	636	13.79390857
BH3083	4	48	20.88791869
BH3084	242	564	107.55056
BH3085	164	387	106.2207338
BH3086	17	369	11.54779244
BH3087	3	258	2.914593305
BH3088	17	714	5.967976768
BH3089	101	624	40.57076514
BH3090	56	462	30.38242718
sdhB	1560	756	517.2246532
sdhA	2794	1770	395.6667445
sdhC	1006	630	400.2523086

BH3094	290	1350	53.84441261
BH3095	170	417	102.1855015
lysC	391	1239	79.10098021
uvrC	744	1776	105.0041318
trxA	1596	315	1269.985456
etfA	46	978	11.78950012
etfB	46	771	14.95477447
BH3101	27	777	8.710020147
BH3102	47	588	20.03535058
BH3103	22	1695	3.253339548
BH3104	34	1701	5.010153336
BH3105	189	408	116.1122539
BH3106	1502	2358	159.6623606
BH3107	426	1716	62.22554798
BH3108	178	540	82.62332281
BH3109	275	276	249.7468539
pheT	1569	2427	162.0427413
pheS	299	1035	72.41145145
BH3112	163	756	54.04334517
BH3113	7	207	8.476256858
BH3114	3	864	0.870329945
dinB	26	510	12.77849143
BH3116	10	918	2.730446887
BH3117	100	693	36.16955617
BH3118	33	585	14.13951419
BH3119	56	405	34.65847249
BH3120	89	492	45.34206739
BH3121	1723	1197	360.8008411
BH3122	1388	684	508.6391428
BH3123	1491	1125	332.2014588
BH3124	433	675	160.7905563
BH3125	4	429	2.337109783
BH3126	2	204	2.457402198
BH3127	2	1068	0.469391431
cysT	1	840	0.298398838
cysW	4	864	1.160439927
cysA	3	1074	0.700153699
BH3131	140	453	77.4651289
BH3132	656	1086	151.4085598
BH3133	188	489	96.36634879
BH3134	99	411	60.37675766

BH3135	272	567	120.2436801
BH3136	145	285	127.5262404
BH3137	0	1218	0
rplT	6618	360	4607.874862
rpmI	3311	201	4128.94918
infC	12524	573	5478.540181
thrS	1125	1938	145.5040775
BH3142	28	867	8.094971948
BH3143	1490	1113	335.557939
dnaI	591	936	158.2661531
dnaB	643	1458	110.5426479
BH3146	719	462	390.0886633
BH3147	412	402	256.8902239
BH3148	328	384	214.1011665
gapB	34	1035	8.234078091
BH3150	521	606	215.4971413
BH3151	205	642	80.03781927
mutM	587	825	178.3448476
polA	1179	2631	112.3231751
hflC	865	933	232.3864909
hflK	587	960	153.2651034
phoR	1174	1770	166.2536714
phoP	422	720	146.9116948
citH	2900	945	769.2058945
citC	4252	1269	839.8622246
citZ	2073	1119	464.3501924
BH3161	662	474	350.070941
BH3162	296	396	187.3583009
pykA	6769	1755	966.7714297
pfk	2343	960	611.7549185
accA	1400	978	358.8108731
accD	1111	849	328.0067514
BH3167	644	654	246.8223786
BH3168	1495	1233	303.9166758
dnaE	546	3351	40.84083654
BH3170	2	336	1.491994192
BH3171	5	507	2.47194304
BH3172	123	225	137.0247466
BH3173	273	945	72.41145145
BH3174	42	288	36.5538577
BH3175	628	1308	120.3450728

BH3176	39	249	39.25922066
BH3177	11	210	13.12954889
BH3178	504	681	185.5068021
pepQ	217	1095	49.67318745
BH3180	55	1116	12.35307019
BH3181	9	381	5.920984825
BH3182	103	759	34.01510869
BH3183	1	159	1.576446693
BH3184	167	444	94.27790326
BH3185	6	111	13.54892023
argH	329	1377	59.88780173
argG	205	1230	41.77583737
BH3188	34	315	27.05482801
BH3189	16	222	18.06522697
BH3190	235	840	70.12372702
BH3191	344	948	90.9549877
ackA	2484	1176	529.4447961
BH3193	405	993	102.2309011
BH3194	1715	501	858.0306718
BH3195	21	444	11.8553052
BH3196	40	678	14.78790703
BH3197	198	537	92.42028827
BH3198	908	996	228.5087972
BH3199	747	798	234.6357182
BH3200	136	1590	21.43967503
BH3201	13	1584	2.057143507
BH3202	212	207	256.7094934
BH3203	621	1149	135.4715144
nifZ	332	1143	72.80618377
BH3205	1550	1686	230.4361136
BH3206	87	822	26.5291814
BH3207	32	654	12.26446602
BH3208	151	483	78.36212973
rpsD	5355	603	2225.96626
BH3210	34	405	21.04264401
BH3211	24	1167	5.15485911
BH3212	30	897	8.383111179
BH3213	2	1038	0.482957657
BH3214	0	957	0
BH3215	7	1158	1.515185811
BH3216	6	582	2.584072415

BH3217	21	723	7.280436389
BH3218	28	480	14.62154308
BH3219	13	387	8.419936215
BH3220	21	369	14.26492008
BH3221	22	396	13.92527912
BH3222	12	375	8.020960776
BH3223	3	729	1.031502157
BH3224	16	1365	2.93808087
BH3225	4	699	1.434363515
BH3226	14	93	37.7330144
BH3227	108	450	60.15720582
tyrZ	614	1239	124.2148385
pdpF	2694	2901	232.7696089
BH3230	10	1077	2.3273447
BH3231	7	909	1.93023671
bglS	0	2556	0
BH3233	0	471	0
acsA	73	1716	10.66306339
acuA	51	633	20.19495456
acuB	68	648	26.30330501
acuC	97	1170	20.78080116
pfs	111	702	39.63348674
BH3239	2426	753	807.5552308
BH3240	3431	810	1061.725171
ccpA	4797	1002	1199.992167
aroA	3391	1095	776.2293947
BH3243	733	2163	84.94227128
BH3244	761	423	450.9420176
BH3245	675	447	378.5059091
BH3246	453	1116	101.7443781
BH3247	0	1215	0
murC	1389	1302	267.4038623
BH3249	1399	1098	319.3682868
BH3250	1558	2883	135.4563052
BH3251	1319	603	548.2818855
BH3252	175	798	54.96820707
BH3253	87	321	67.93453928
BH3254	311	1011	77.10555147
BH3255	19	444	10.72622851
BH3256	304	534	142.6949951
BH3257	389	1074	90.7865963

BH3258	50	309	40.55906541
BH3259	401	720	139.6009232
BH3260	158	855	46.31987582
BH3261	284	663	107.369573
BH3262	27	249	27.17946046
BH3263	802	786	255.7574166
amyX	420	2154	48.87423871
BH3265	275	870	79.2300364
BH3266	452	336	337.1906874
BH3267	372	966	96.52553729
BH3268	249	684	91.24722374
BH3269	60	384	39.16484754
BH3270	57	561	25.46762278
BH3271	223	939	59.52723153
BH3272	137	1398	24.56347519
BH3273	347	717	121.3072433
BH3274	325	675	120.6857524
BH3275	535	1197	112.0304411
BH3276	567	1146	124.0151822
BH3277	278	1620	43.01363996
BH3278	10	492	5.094614314
BH3279	124	1269	24.49268952
BH3280	142	426	83.55167475
leuS	3331	2421	344.8706674
BH3282	132	1206	27.43487828
BH3283	432	978	110.7187837
BH3284	407	978	104.3114467
BH3285	202	573	88.3635513
BH3286	105	591	44.53261852
BH3287	353	1083	81.70011409
BH3288	530	783	169.6643204
BH3289	72	525	34.37554618
BH3290	13	960	3.394286787
BH3291	22	999	5.519930464
BH3292	6	786	1.913397132
BH3293	1	351	0.714116878
BH3294	19	765	6.225418903
BH3295	22	771	7.152283441
BH3296	6	987	1.523738749
BH3297	3	909	0.827244304
BH3298	33	3216	2.572019838

BH3299	8	666	3.010871162
metK	2536	1200	529.7176179
BH3301	1	357	0.702114914
pckA	28	1584	4.430770631
BH3303	10	324	7.73626618
BH3304	22	390	14.13951419
BH3305	85	861	24.74526952
BH3306	179	798	56.22462323
BH3307	6	54	27.85055825
BH3308	20	474	10.57616136
BH3309	10	1212	2.068110761
BH3310	235	489	120.457936
BH3311	66	144	114.8835528
BH3312	40	147	68.20544877
patB	502	1194	105.3842732
BH3314	286	975	73.52547378
BH3315	10	327	7.665291261
gabD	455	1428	79.86557145
BH3317	18	297	15.19121359
BH3318	29	315	23.07617683
BH3319	373	348	268.6618507
BH3320	702	684	257.2512091
ssuE	127	537	59.27967985
BH3322	215	936	57.5756733
BH3323	8	714	2.808459655
BH3324	10	1392	1.800682645
BH3325	18	729	6.189012944
BH3326	127	960	33.15957092
BH3327	23	282	20.44349488
BH3328	56	531	26.43442817
BH3329	81	783	25.92983009
BH3330	8	636	3.152893387
BH3331	1	525	0.477438141
BH3332	32	588	13.64108975
BH3333	36	1173	7.692737317
BH3334	0	78	0
BH3335	522	603	216.9849464
BH3336	261	468	139.7883789
BH3337	42	309	34.06961495
BH3338	57	801	17.83687438
trnR-Ala	161	76	530.9928803

BH3339	67	162	103.6659668
BH3340	13	1017	3.204046524
BH3341	13	429	7.595606795
BH3342	14	309	11.35653832
pgi	1699	1353	314.7545352
BH3344	500	1164	107.669684
BH3345	5	228	5.496820707
BH3346	48	726	16.57223301
BH3347	4851	417	2915.89334
BH3348	976	1170	209.0934219
thiK	421	786	134.2566987
BH3350	590	1182	125.115452
BH3351	284	495	143.8101553
BH3352	28	441	15.91460471
BH3353	417	477	219.1260904
BH3354	156	441	88.66708341
BH3355	12	819	3.672601088
hbs	22	273	20.19930598
BH3357	281	429	164.1819623
BH3358	18	594	7.595606795
BH3359	87	1323	16.48298345
BH3360	56	1296	10.83077265
BH3361	38	429	22.20254294
BH3362	32	552	14.53072604
spsI	7	744	2.3583134
spsJ	5	966	1.297386254
rfdD	1	852	0.294196038
rfdC	3	456	1.649046212
spsA	3	702	1.071175317
BH3368	3	1125	0.668413398
BH3369	1	660	0.37978034
BH3370	4	765	1.310614506
BH3371	6	768	1.958242377
BH3372	70	801	21.90493345
cgeD	11	1311	2.103131401
BH3374	5	798	1.570520202
BH3375	1	261	0.960364078
BH3376	7	1194	1.469501817
BH3377	0	414	0
BH3378	0	69	0
BH3379	2	927	0.540787539

BH3380	19	1359	3.504374879
BH3381	2	750	0.668413398
BH3382	0	1071	0
BH3383	1	174	1.440546116
BH3384	9	1770	1.274517072
BH3385	4	627	1.599075115
BH3386	12	1140	2.638473939
topB	466	2166	53.9267042
BH3388	38	1131	8.421654219
pbpC	1878	2019	233.1501414
BH3390	1701	1062	401.4728778
BH3391	216	1269	42.66468498
BH3392	112	528	53.16924757
BH3393	84	996	21.13958036
BH3394	34	561	15.19121359
BH3395	69	387	44.69043068
BH3396	61	591	25.87133076
BH3397	76	993	19.18407033
BH3398	2	111	4.516306743
BH3399	444	990	112.4149806
BH3400	23	93	61.98995223
BH3401	151	1428	26.504838
BH3402	110	477	57.80304542
BH3403	409	822	124.7176459
BH3404	19	705	6.755241788
BH3405	37	318	29.16426383
BH3406	7	153	11.46787693
BH3407	843	1203	175.6460394
BH3408	218	993	55.02799122
BH3409	0	1215	0
BH3410	740	354	523.9681298
BH3411	755	1095	172.8260669
BH3412	618	861	179.9126655
BH3413	143	240	149.3486186
BH3414	127	237	134.3172493
BH3415	767	1641	117.155639
BH3416	26	306	21.29748572
BH3417	0	786	0
BH3418	0	285	0
BH3419	2101	240	2194.275858
thrB	2297	930	619.0909577

thrC	1767	1065	415.8755191
hom	2100	1296	406.1539745
BH3423	83	1059	19.64529463
BH3424	39	510	19.16773715
BH3425	1521	1764	216.1260158
BH3426	631	726	217.8558131
BH3427	156	1194	32.74889764
BH3428	206	780	66.19863461
BH3429	573	648	221.6440261
BH3430	103	456	56.61725328
BH3431	1342	972	346.0689738
BH3432	54	267	50.69427457
BH3433	168	282	149.3263974
BH3434	150	660	56.96705096
BH3435	716	912	196.7861813
BH3436	6	1014	1.483165824
BH3437	6	171	8.794913131
BH3438	37	105	88.32605616
BH3439	214	1518	35.33608379
BH3440	0	1167	0
BH3441	1	1554	0.161296669
BH3442	2	1080	0.464175971
BH3443	47	624	18.87946497
BH3444	0	786	0
BH3445	0	285	0
BH3446	4	603	1.662719895
BH3447	6	1809	0.831359948
BH3448	8	1008	1.989325589
BH3449	569	1551	91.95532482
dfrA	578	492	294.4687073
thyB	606	795	191.0653392
BH3452	100	303	82.72443044
BH3453	510	1389	92.03316225
BH3454	243	822	74.09874804
BH3455	632	849	186.5888991
BH3456	1	99	2.531868932
BH3457	19	156	30.52849654
BH3458	0	1173	0
BH3459	0	96	0
BH3460	11854	543	5471.942279
BH3461	0	1284	0

BH3462	241	234	258.1532515
BH3463	109	240	113.8391568
BH3464	49	36	341.1693386
BH3465	1	366	0.684849793
BH3466	0	471	0
BH3467	7148	1398	1281.603801
BH3468	1379	441	783.7942822
BH3469	3457	759	1141.652726
BH3470	2698	1308	517.0238956
BH3471	1391	792	440.2287105
BH3472	78	189	103.4449306
BH3473	7	462	3.797803398
BH3474	108	123	220.0873384
BH3475	71	594	29.96044903
BH3476	81	1275	15.92396625
BH3477	64	885	18.12646503
BH3478	0	471	0
BH3479	2047	741	692.4302761
BH3480	414	657	157.9470016
BH3481	666	1017	164.1457681
BH3482	45	1242	9.081703777
BH3483	33	237	34.90133249
BH3484	1385	387	897.0470506
BH3485	350	360	243.6923847
BH3486	16	1785	2.246767724
BH3487	10	1182	2.120600882
BH3488	19	2382	1.999347381
BH3489	42	270	38.99078155
BH3490	46	324	35.58682443
BH3491	41	249	41.27251403
BH3492	31	390	19.9238609
BH3493	68	852	20.00533057
BH3494	48	681	17.66731448
BH3495	1	627	0.399768779
BH3496	17	816	5.221979672
BH3497	1894	1887	251.5848521
BH3498	174	402	108.4924732
BH3499	0	1218	0
BH3500	4966	1557	799.455909
BH3501	1737	372	1170.39725
BH3502	1062	621	428.6564183

BH3503	30	945	7.957302357
BH3504	187	1200	39.06040794
BH3505	223	687	81.3625479
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BH3507	0	1215	0
rnpB	175	423	103.6988871
BH3508	1066	981	272.3733495
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BH3510	12	828	3.632681511
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BH3513	28	2874	2.44201137
BH3514	12	804	3.741119765
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BH3516	6	1038	1.448872972
BH3517	5	747	1.677744473
BH3518	21	2823	1.864596355
BH3519	0	390	0
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BH3528	2	990	0.506373786
BH3529	1	720	0.348131978
BH3530	52	186	70.07559818
BH3531	163	1473	27.73711402
BH3532	0	1356	0
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BH3534	10	480	5.221979672
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BH3538	2	192	2.610989836
BH3539	0	507	0
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BH3541	2	804	0.623519961
BH3542	6	891	1.687912621

BH3543	6	879	1.710955797
BH3544	2	963	0.520571182
BH3545	0	201	0
BH3546	1	294	0.85256811
BH3547	4	240	4.177583737
BH3548	1	297	0.843956311
BH3549	75	465	40.42822972
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BH3551	206	1137	45.41331134
ssrA	84718	354	59985.85408
BH3552	238	474	125.8563202
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BH3554	927	747	311.0538253
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eno	7592	1290	1475.172825
pgm	6922	1533	1131.790005
tpi	2851	756	945.2612091
pgk	3480	1185	736.1008307
gap	9567	1008	2378.984739
BH3561	5874	1020	1443.478051
BH3562	48	246	48.90829741
sigL	400	1338	74.93423744
clpP	908	585	389.0508752
BH3565	0	1215	0
chr	246	255	241.8083763
BH3567	628	963	163.4593512
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BH3569	733	888	206.9033027
BH3570	449	480	234.4668873
trxB	2151	948	568.7330772
BH3572	1523	1077	354.4545979
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BH3574	8	1362	1.472276207
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BH3576	167	855	48.95834976
hisI	51	636	20.09969534
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hisH	36	645	13.99004786
hisB	49	585	20.99503622
hisD	73	1275	14.35122884

hisG	43	639	16.8672395
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BH3585	0	567	0
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BH3588	1028	954	270.0978668
lgt	769	870	221.5559927
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BH3591	529	360	368.3236328
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BH3593	3007	1095	688.3284547
uvrA	1260	2874	109.8905117
uvrB	456	1983	57.6392794
BH3596	229	564	101.7730506
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BH3599	1147	1440	199.6536894
BH3600	5412	1386	978.7481899
ftsX	2632	897	735.4782874
ftsE	2081	672	776.2099783
BH3603	232	336	173.0713263
BH3604	254	882	72.18409995
prfB	1619	867	468.0628423
secA	3779	2517	376.3310833
BH3607	139	252	138.2581285
BH3608	383	564	170.2143161
BH3609	6	279	5.390430629
cspC	52122	198	65983.03623
BH3611	4351	936	1165.170951
fliT	340	360	236.7297451
fliS	462	402	288.0662219
fliD	2122	1599	332.6391254
BH3615	179	333	134.7364845
hag	33575	819	10275.63179
csrA	163	228	179.1963551
BH3618	354	456	194.587453
BH3619	244	588	104.0133094
flgL	984	1188	207.6132524
flgK	859	1671	128.8525828
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flgM	98	261	94.1156796

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comFC	191	534	89.65376335
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degS	2462	1134	544.1910667
BH3630	80	642	31.23427093
pcp	161	606	66.59316651
BH3632	149	963	38.78255308
BH3633	38	483	19.72027106
BH3634	64	903	17.76514015
BH3635	0	1356	0
BH3636	1442	1833	197.1874222
BH3637	195	909	53.77087979
BH3638	104	969	26.90208723
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BH3640	55	1023	13.47607657
BH3641	6	459	3.276536265
BH3642	6	921	1.632931754
BH3643	3	1002	0.750464144
BH3644	9	1674	1.347607657
BH3645	1	969	0.258673916
BH3646	0	990	0
BH3647	2542	1080	589.9676589
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tagH	523	1605	81.67761849
tagG	120	771	39.01245513
tuaG	86	774	27.85055825
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BH3666	645	798	202.5971061
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BH3668	483	708	170.9977072
BH3669	220	699	78.88999332
lytR	2831	915	775.5239056
lytE	3215	1251	644.1693868
BH3672	475	1200	99.21761376
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BH3674	810	1242	163.470668
BH3675	29	396	18.35604976
BH3676	63	1023	15.43623316
trkA	54	1053	12.85410381
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xynB	22	1587	3.474738836
BH3684	18	624	7.230433392
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BH3689	24	903	6.661927555
BH3690	22	1263	4.366120771
BH3691	17	2109	2.020453017
BH3692	132	1014	32.62964813
BH3693	54	1218	11.11278433
BH3694	7	180	9.747695387
BH3695	16	99	40.50990291
BH3696	65	1113	14.63843358
BH3697	46	3219	3.581898451
BH3698	8	216	9.283519416
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glpQ	1	855	0.293163771
BH3701	71	2019	8.814515464
BH3702	10	840	2.983988384
BH3703	35	510	17.20181539
BH3704	0	1284	0
BH3705	483	1686	71.80686638

BH3706	53	1116	11.90386764
BH3707	128	441	72.75247869
BH3708	1578	1167	338.9319865
BH3709	527	1032	127.9992227
BH3710	200	1110	45.16306743
BH3711	41	1452	7.077724514
BH3712	151	1188	31.85935072
BH3713	103	912	28.30862664
BH3714	92	816	28.26012528
BH3715	58	849	17.12366479
BH3716	116	624	46.5961263
gtaB	929	882	264.0119246
BH3718	755	1827	103.5821255
BH3719	0	57	0
BH3720	71	246	72.34352326
BH3721	22	330	16.71033495
BH3722	43	141	76.44089392
BH3723	56	645	21.76229668
kdgK	78	954	20.49380701
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rbsA	34	1500	5.681513883
rbsC	43	945	11.40546671
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BH3735	180	423	106.6617124
BH3736	281	303	232.4556495
flhP	3018	843	897.362827
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spoIIID	1	285	0.879491313
BH3741	4	660	1.519121359
BH3742	6	1932	0.778431752
BH3743	6	1665	0.903261349
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murA	4028	1323	763.1431879
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BH3752	5	1392	0.900341323
atpC	3866	402	2410.528168
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BH3762	375	228	412.261553
BH3763	108	2274	11.90446025
upp	1236	630	491.7612857
glyA	6603	1242	1332.588668
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mcpA	1698	1302	326.8911146
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spoIIR	94	633	37.22207311
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prfA	2386	1071	558.4153948
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tdk	1466	615	597.4963667
rpmE	5604	246	5710.043723
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murZ	1271	1287	247.5388779
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fbaA	7485	864	2171.473213
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ctrA	3583	1599	561.6616334
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acdA	12	1143	2.631548811
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BH3803	71	1197	14.86759125
BH3804	93	504	46.25181995
BH3805	115	780	36.95554845
BH3806	42	162	64.98463591
BH3807	60	480	31.33187803
argS	1705	1671	255.7551265
BH3809	432	435	248.9263689
BH3810	41	165	62.28397572
BH3811	159	828	48.13303002
BH3812	60	2064	7.286483263
BH3813	56	540	25.99385437
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BH3815	79	459	43.14106082
BH3816	629	3282	48.03839435
BH3817	155	501	77.54796159
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BH3819	37	1002	9.255724448
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BH3821	49	225	54.58709417
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pta	3228	993	814.8181453
BH3824	204	741	69.00624149
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cwlJ	19	432	11.02417931
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citT	49	693	17.72308252
citS	43	1617	6.665532494
BH3840	4	999	1.003623721
BH3841	7	1446	1.213406065
BH3842	364	1593	57.27459437
BH3843	533	1005	132.9344556
BH3844	2	1179	0.425199363
BH3845	4	1311	0.764775055
BH3846	2	987	0.507912916
BH3847	3	822	0.914799359
BH3848	9	456	4.947138636
BH3849	369	837	110.5038279
ung	244	675	90.6071495
mtlD	37	1125	8.243765242
BH3852	19	438	10.87316315
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BH3854	16	1407	2.850376964
BH3855	60	456	32.98092424
BH3856	123	645	47.7993302
BH3857	526	264	499.4111468
BH3858	2	360	1.392527912
BH3859	6	639	2.353568303
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BH3870	570	366	390.364382
BH3871	19	1527	3.118824794
BH3872	73	393	46.5593302
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BH3875	280	1377	50.96834189
BH3876	53	552	24.06651501
lrpC	17	465	9.163732069
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BH3880	130	1275	25.55698286
BH3881	106	1197	22.19668552
BH3882	40	465	21.56172252
BH3883	80	309	64.89450466
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BH3887	30	909	8.272443044
BH3888	107	684	39.21065438
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fhuD	16	927	4.326300311
BH3891	102	1734	14.74441319
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BH3900	24	1740	3.457310679
BH3901	8	984	2.037845726
BH3902	231	960	60.31386521
mcpB	596	2088	71.54712378
BH3904	3	1428	0.526586185
BH3905	1	207	1.210893837
BH3906	3	660	1.139341019
bioF	21	1188	4.430770631
BH3908	25	726	8.631371358
BH3909	57	816	17.50899066
BH3910	95	282	84.44052235

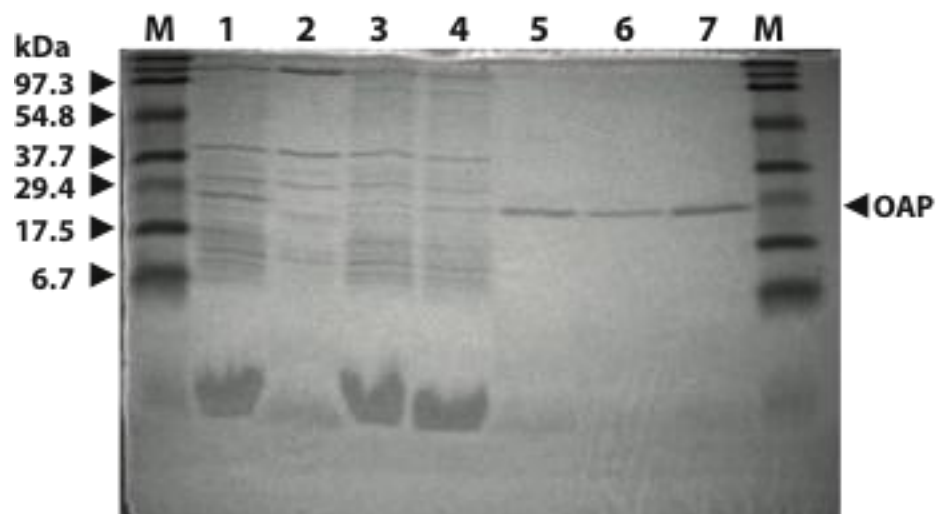
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tlpA	1979	2004	247.5280903
BH3916	141	948	37.2809688
BH3917	147	786	46.87822972
BH3918	133	1401	23.79523071
BH3919	27	1293	5.234095634
BH3920	6	330	4.557364077
BH3921	7	312	5.623670416
BH3922	4	903	1.110321259
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mmgD	3	1107	0.679281909
BH3925	22	870	6.338402912
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BH3927	192	918	52.42458023
BH3928	21	228	23.08664697
BH3929	76	861	22.12518216
BH3930	177	1833	24.20400398
BH3931	8	516	3.886124407
BH3932	73	462	39.605664
BH3933	9	240	9.399563409
BH3934	10	234	10.71175317
BH3935	1988	462	1078.576165
lctP	120	1575	19.09752566
lctE	207	933	55.61156486
BH3938	14	291	12.0590046
BH3939	580	1479	98.29608794
BH3940	276	1548	44.69043068
BH3941	38	252	37.7971862
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rocD	96	1203	20.00239595
rocR	64	1440	11.1402233
BH3945	4	138	7.265363022
BH3946	4	1422	0.705077424
BH3947	6	1383	1.087440452
BH3948	19	906	5.256562319
BH3949	65	1047	15.56120017
BH3950	0	945	0
BH3952	23	957	6.024101941

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BH3953	27	474	14.27781784
BH3954	3	90	8.355167475
BH3955	24	768	7.832969508
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BH3960	872	1503	145.4232742
BH3961	383	888	108.1090927
BH3962	93	270	86.33673057
BH3963	19	2988	1.593857249
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cydD	90	1728	13.05494918
BH3973	23	102	56.52025056
BH3974	220	1017	54.22232579
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BH3978	9	750	3.007860291
BH3979	8	774	2.590749605
BH3980	24	339	17.74548844
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BH3982	320	291	275.6343909
BH3983	2	105	4.774381414
BH3984	18	627	7.195838017
BH3985	28	1365	5.141641523
BH3986	137	1317	26.07421285
BH3987	46	432	26.69011832
BH3988	5	156	8.03381488
BH3989	73	1602	11.42185816
BH3990	6166	666	2320.628948
BH3991	9	438	5.150445704
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BH3993	7	219	8.011804428
BH3994	6	246	6.113537177
BH3995	35	1035	8.476256858
BH3996	71	567	31.38713707
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BH4000	51	786	16.26387562
BH4001	273	1875	36.49537153
BH4002	24	975	6.169969827
BH4003	39	795	12.29628421
BH4004	63	1098	14.38184565
BH4005	2	543	0.923222925
BH4006	2	267	1.877565725
BH4007	26	480	13.57714715
BH4008	10	159	15.76446693
BH4009	20	354	14.1613008
BH4010	1340	624	538.2655969
BH4011	1942	978	497.7219398
BH4012	196	132	372.184733
BH4013	185	135	343.4902184
BH4014	102	1113	22.97108039
BH4015	229	411	139.6593687
BH4016	266	264	252.5539259
BH4017	857	1845	116.4289191
BH4018	264	489	135.3229579
BH4019	405	573	177.1645459
BH4020	62	495	31.39517475
BH4021	91	570	40.01685475
BH4022	265	1221	54.40096759
BH4023	868	795	273.671146
BH4024	878	789	278.9291651
BH4025	1193	1320	226.5389727
BH4026	1009	1824	138.6573023
BH4027	311	711	109.6395394
trnS-Thr	55	73	188.8496758
trnS-Phe	138	76	455.1367545
trnS-Asp	51	77	166.0182628
trnS-Glu	226	75	755.3071397
trnS-Lys	230	76	758.5612576
purA	1240	1287	241.5013443

dnaC	702	1365	128.9082982
rplI	476	444	268.7202512
BH4031	2377	1965	303.2096655
BH4032	572	939	152.6886836
BH4033	472	1383	85.54531558
BH4034	34	291	29.28615404
BH4035	14	138	25.42877058
BH4036	921	2124	108.6879837
BH4037	179	369	121.5914616
BH4038	500	1473	85.08317184
BH4039	606	549	276.6793164
BH4040	12	543	5.539337552
BH4041	37	1284	7.222925153
BH4042	4	474	2.115232272
BH4043	149	636	58.72263933
BH4044	23	474	12.16258556
BH4045	14	1344	2.610989836
BH4046	17	294	14.49365786
BH4047	42	510	20.64217847
rpsR	7799	234	8354.096299
ssb	15050	507	7440.54855
rpsF	8812	288	7669.347478
BH4051	1092	1101	248.6060731
BH4052	74	198	93.67915047
BH4053	15	1026	3.664547138
BH4054	92	651	35.42282985
BH4055	199	711	70.15520369
BH4056	656	1152	142.734111
spo0J	876	867	253.2569795
soj	1077	762	354.2722587
BH4059	1129	852	332.1473267
gidB	709	717	247.8583155
gidA	1971	1899	260.1585323
thdF	1033	1377	188.0367756
jag	2813	624	1129.956063
spoIIIJ	2301	774	745.164355
rnpA	1178	360	820.1989404
rpmH	1564	138	2840.756941

Fig. S1



Lanes

M = markers

1 = membrane fraction - solubilized proteins

2 = membrane fraction - pellet

3 = nickel column flow-through I

4 = nickel column flow-through II

5 = elution I (10 mM imidazole)

6 = elution II (10 mM imidazole)

7 = elution III (200 mM imidazole)

Fig. S2

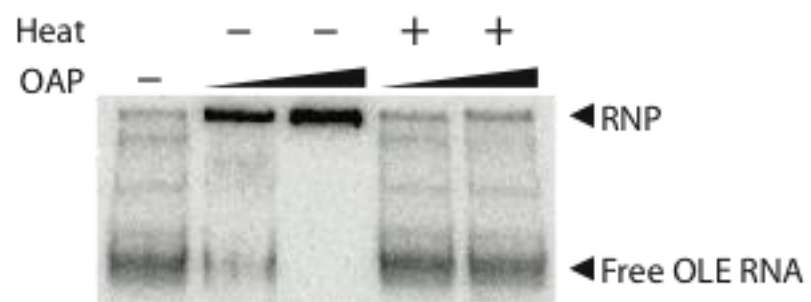


Table S2

Construct	K_D (nM)	n
OLE ₂₈₅₋₆₃₇ U286A	118	2.26
OLE ₂₈₅₋₆₃₇ A287U	263	0.91
OLE ₂₈₅₋₆₃₇ G288U	132	2.03
OLE ₂₈₅₋₆₃₇ C289U	88	1.03
OLE ₂₈₅₋₆₃₇ C290U	256	1.40
OLE ₂₈₅₋₆₃₇ U291A	103	1.78
OLE ₂₈₅₋₆₃₇ G292U	131	1.00
OLE ₁₋₆₃₇ A287U	115	1.62
OLE ₁₋₆₃₇ C289U	78	1.78
OLE ₁₋₆₃₇ G292U	121	1.59
OLE ₁₋₆₃₇ A287U, G288C	113	1.97
OLE ₁₋₆₃₇ A432U	50	1.95
OLE ₁₋₆₃₇ A434U	63	1.62
OLE ₁₋₆₃₇ C435U	74	1.55
OLE-AS	38	1.80
HEARO RNA	59	1.38
RNase P RNA	216	1.20
OLE ₂₈₅₋₄₃₈	n/d ^a	n/d
Sites A+B (GGUAGCCUGUAAUAAUAAUAGACUG)	n/d	n/d
Site A (GGUAGCCUGUAAUAA)	n/d	n/d
Site B (GGUAGACUGUAAUAA)	n/d	n/d

(a) No binding was observed.

Fig. S3

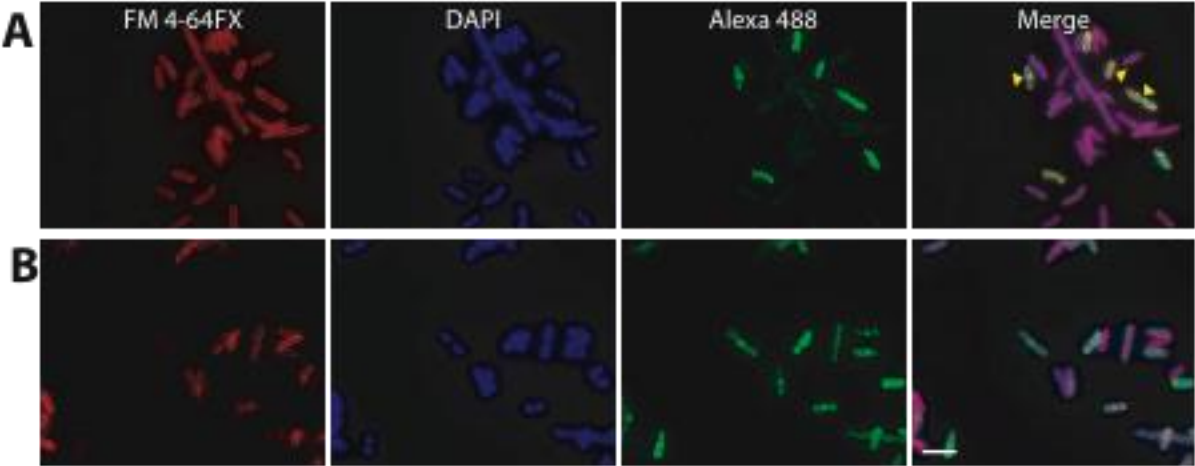


Table S3

Primer	Purpose	Sequence (5' - 3')
OLE1	KpnI-OAP	GCGGGTACCATGAAATCTCTAGGAAAATCAATAAAT
OLE2	3' BamHI-OAP	GCGGGATCCTCACTTTTCGAGAATTTTTCTCTTT
OLE3	5' OLE ₁₋₆₃₇	TAATACGACTCACTATAGGTGTCTTTTAGAATAAGAGTGG
OLE4	3' OLE ₁₋₆₃₇	CGTTCCGACTGCGTATGTATGA
OLE5	5' OLE ₂₈₅₋₆₃₇	TAATACGACTCACTATAGGGGTAGCCTGCCTTGAGTGG
OLE6	5' OLE ₂₉₂₋₆₃₇	TAATACGACTCACTATAGGGGCCTTGAGTGGAGTAGAGG
OLE7	3' OLE ₁₋₄₃₈	ACAGTCTAGGAGTTTTCTCCGG
OLE8	3' OLE ₁₋₄₃₆	AGTCTAGGAGTTTTCTCCGGC
OLE9	5' OLE ₂₈₅₋₆₃₇ U286A	TAATACGACTCACTATAGGAAGCCTGCCTTGAGTGG
OLE10	5' OLE ₂₈₅₋₆₃₇ A287U	TAATACGACTCACTATAGGTTGCCTGCCTTGAGTGG
OLE11	5' OLE ₂₈₅₋₆₃₇ G288U	TAATACGACTCACTATAGGTATCCTGCCTTGAGTGG
OLE12	5' OLE ₂₈₅₋₆₃₇ C289U	TAATACGACTCACTATAGGTAGTCTGCCTTGAGTGG
OLE13	5' OLE ₂₈₅₋₆₃₇ C290U	TAATACGACTCACTATAGGTAGCTTGCCTTGAGTGG
OLE14	5' OLE ₂₈₅₋₆₃₇ U291A	TAATACGACTCACTATAGGTAGCCAGCCTTGAGTGG
OLE15	5' OLE ₂₈₅₋₆₃₇ G292U	TAATACGACTCACTATAGGTAGCCTTCCTTGAGTGG
OLE16	5' A287U (OLE ₁₋₆₃₇)	GTCAGCAGCGTTGCCTGCCTTGAGTG
OLE17	3' A287U (OLE ₁₋₆₃₇)	CACTCAAGGCAGGCAACGCTGCTGAC
OLE18	5' C289U (OLE ₁₋₆₃₇)	GTCAGCAGCGTAGTCTGCCTTGAGTG
OLE19	3' C289U (OLE ₁₋₆₃₇)	CACTCAAGGCAGACTACGCTGCTGAC
OLE20	5' G292U (OLE ₁₋₆₃₇)	CAGCAGCGTAGCCTTCCTTGAGTGGAG
OLE21	3' G292U (OLE ₁₋₆₃₇)	CTCCACTCAAGGAAGGCTACGCTGCTG
OLE22	5' A432U (OLE ₁₋₆₃₇)	CCGAGGAAAACCTCCTTGACTGTTCCATGG
OLE23	3' A432U (OLE ₁₋₆₃₇)	CCATGGAACAGTCAAGGAGTTTTCTCCGG
OLE24	5' A434U (OLE ₁₋₆₃₇)	GAGGAAAACCTCCTAGTCTGTTCCATGGGGAC
OLE25	3' A434U (OLE ₁₋₆₃₇)	GTCCCCATGGAACAGACTAGGAGTTTTCTC
OLE26	5' C435U (OLE ₁₋₆₃₇)	GAGGAAAACCTCCTAGATTGTTCCATGGGGAC
OLE27	3' C435U (OLE ₁₋₆₃₇)	GTCCCCATGGAACAATCTAGGAGTTTTCTC
OLE28	5' A287U, G288C (OLE ₁₋₆₃₇)	CTTGTCAGCAGCGTTCCTGCCTTGAGTGGAG
OLE29	3' A287U, G288C (OLE ₁₋₆₃₇)	CTCCACTCAAGGCAGGGAACGCTGCTGACAAG
OLE30	Synthetic Site A	TTATTACAGGCTACCCTATAGTGAGTCGTATTA
OLE31	Synthetic Site B	TTATTACAGTCTACCCTATAGTGAGTCGTATTA
OLE32	Synthetic A+B	CAGTCTATTATTATTACAGGCTACCCTATAGTGAGTCGTATTA
OLE33	3' OLE probe	TTCGTGATCAAAGAAGGGAATT
OLE34	5' ispA probe	TAATACGACTCACTATAGGCTAATGGTTACGATTCACGAC
OLE35	3' ispA probe	ATGAGTGTACAACGTTACAATTTT
OLE36	5' 4.5S RNA probe	TAATACGACTCACTATAGGGTGGGGGCCCTGCCAGCT
OLE37	3' 4.5S RNA probe	GGGGGCTCTGTTGGTTCTCCCGC