

Supplementary Table S9. Up-regulated genes in disease of the uncultured organism candidate division TM7. In red are genes that were identified as putative virulence factors or virulence factors related genes according to the VFDB database (see Material and Methods).

VBICanDiv80122_0419	3'-to-5' oligoribonuclease (orn)
VBICanDiv80122_0183	4-alpha-glucanotransferase
VBICanDiv80122_0370	ABC transporter ATP-binding protein
VBICanDiv80122_0359	Adenylate kinase (EC 2.7.4.3)
VBICanDiv80122_0471	Alanyl-tRNA synthetase (EC 6.1.1.7)
VBICanDiv33328_0087	Alpha-amylase (EC 3.2.1.1)
VBICanDiv80122_0207	Alpha-amylase (EC 3.2.1.1)
VBICanDiv80122_0279	Arginine/ornithine antiporter ArcD
VBICanDiv80122_0459	ATP-dependent DNA helicase UvrD/PcrA
VBICanDiv80122_0025	ATPase AAA family
VBICanDiv80122_0262	Bacillosamine/Legionaminic acid biosynthesis aminotransferase PglE; 4-keto-6-deoxy-N-Acetyl-D-hexosaminy-(Lipid carrier) aminotransferase
VBICanDiv80122_0286	Cell division protein FtsA
VBICanDiv80122_0378	Cell division protein FtsH (EC 3.4.24.-)
VBICanDiv80122_0460	Cell wall-binding protein
VBICanDiv80122_0162	Chaperone protein DnaJ
VBICanDiv80122_0016	Chitinase (EC 3.2.1.14)
VBICanDiv80122_0078	Chromosomal replication initiator protein DnaA
VBICanDiv80122_0317	conserved hypothetical protein
VBICanDiv80122_0417	CTP synthase (EC 6.3.4.2)
VBICanDiv80122_0467	Cysteine desulfurase (EC 2.8.1.7)
VBICanDiv80122_0173	dCTP deaminase(EC:3.5.4.13)
VBICanDiv33328_0051	dihydrolipoamide dehydrogenase(EC:1.8.1.4)
VBICanDiv80122_0046	Dihydroorotate dehydrogenase (EC 1.3.3.1)
VBICanDiv80122_0002	DNA gyrase subunit A (EC 5.99.1.3)
VBICanDiv80122_0168	DNA polymerase III subunits gamma and tau (EC 2.7.7.7)
VBICanDiv80122_0080	DNA recombination and repair protein RecF
VBICanDiv80122_0073	DNA repair protein RadC
VBICanDiv33328_0082	dTDP-4-dehydrorhamnose 3 5-epimerase (EC 5.1.3.13) / dTDP-4-dehydrorhamnose reductase (EC 1.1.1.133)
VBICanDiv33328_0040	dTDP-glucose 4 6-dehydratase (EC 4.2.1.46)
VBICanDiv80122_0134	dTDP-glucose 4 6-dehydratase (EC 4.2.1.46)
VBICanDiv80122_0031	Excinuclease ABC subunit C
VBICanDiv80122_0434	FIG002344: Hydrolase (HAD superfamily)
VBICanDiv80122_0115	FIG00473119: hypothetical protein
VBICanDiv80122_0331	Fructose-bisphosphate aldolase class II (EC 4.1.2.13)
VBICanDiv80122_0401	Glucose-6-phosphate isomerase archaeal II (EC 5.3.1.9) / Mannose-6-phosphate isomerase archaeal (EC 5.3.1.8)
VBICanDiv80122_0300	Glutamyl-tRNA synthetase (EC 6.1.1.17) @ Glutamyl-tRNA(Gln) synthetase (EC 6.1.1.24)
VBICanDiv80122_0320	glycosyl transferase family 2

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VBICanDiv80122_0316	glycosyl transferase group 2 family protein
VBICanDiv80122_0291	GTP-binding protein EngA
VBICanDiv80122_0399	Heat shock protein 60 family chaperone GroEL
VBICanDiv80122_0398	Heat shock protein 60 family co-chaperone GroES
VBICanDiv80122_0101	heat shock protein Hsp20
VBICanDiv80122_0388	Heat-inducible transcription repressor HrcA
VBICanDiv80122_0315	hemagglutinin-related protein
VBICanDiv33328_0114	hypothetical protein
VBICanDiv33328_0072	hypothetical protein
VBICanDiv80122_0084	hypothetical protein
VBICanDiv80122_0088	hypothetical protein
VBICanDiv33328_0128	hypothetical protein
VBICanDiv80122_0093	hypothetical protein
VBICanDiv80122_0234	hypothetical protein
VBICanDiv80122_0372	hypothetical protein
VBICanDiv33328_0024	hypothetical protein
VBICanDiv80122_0137	hypothetical protein
VBICanDiv80122_0441	hypothetical protein
VBICanDiv80122_0094	hypothetical protein
VBICanDiv80122_0022	hypothetical protein
VBICanDiv80122_0461	hypothetical protein
VBICanDiv80122_0442	hypothetical protein
VBICanDiv80122_0092	hypothetical protein
VBICanDiv80122_0104	hypothetical protein
VBICanDiv80122_0096	hypothetical protein
VBICanDiv80122_0347	hypothetical protein
VBICanDiv80122_0373	hypothetical protein
VBICanDiv80122_0276	hypothetical protein
VBICanDiv80122_0083	hypothetical protein
VBICanDiv80122_0427	hypothetical protein
VBICanDiv80122_0033	hypothetical protein
VBICanDiv80122_0443	hypothetical protein
VBICanDiv33328_0116	hypothetical protein
VBICanDiv80122_0288	hypothetical protein
VBICanDiv80122_0098	hypothetical protein
VBICanDiv33328_0014	hypothetical protein
VBICanDiv80122_0225	hypothetical protein
VBICanDiv80122_0263	hypothetical protein

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VBICanDiv80122_0097	hypothetical protein
VBICanDiv33328_0043	hypothetical protein
VBICanDiv80122_0181	hypothetical protein
VBICanDiv80122_0243	hypothetical protein
VBICanDiv80122_0034	hypothetical protein
VBICanDiv80122_0030	hypothetical protein
VBICanDiv80122_0241	hypothetical protein
VBICanDiv80122_0274	hypothetical protein
VBICanDiv33328_0127	hypothetical protein
VBICanDiv80122_0246	hypothetical protein
VBICanDiv80122_0091	hypothetical protein
VBICanDiv80122_0128	hypothetical protein
VBICanDiv80122_0447	hypothetical protein
VBICanDiv80122_0100	hypothetical protein
VBICanDiv80122_0275	hypothetical protein
VBICanDiv80122_0268	hypothetical protein
VBICanDiv33328_0012	hypothetical protein
VBICanDiv80122_0449	hypothetical protein
VBICanDiv80122_0379	integral membrane protein MviN
VBICanDiv80122_0267	Isoleucyl-tRNA synthetase (EC 6.1.1.5)
VBICanDiv80122_0453	Large exoproteins involved in heme utilization or adhesion
VBICanDiv80122_0418	Large-conductance mechanosensitive channel
VBICanDiv80122_0048	LemA protein
VBICanDiv80122_0171	LSU ribosomal protein L10p (P0)
VBICanDiv80122_0301	LSU ribosomal protein L13p (L13Ae)
VBICanDiv80122_0339	LSU ribosomal protein L15p (L27Ae)
VBICanDiv80122_0127	LSU ribosomal protein L15p (L27Ae)
VBICanDiv80122_0341	LSU ribosomal protein L18p (L5e)
VBICanDiv80122_0174	LSU ribosomal protein L1p (L10Ae)
VBICanDiv80122_0170	LSU ribosomal protein L7/L12 (P1/P2)
VBICanDiv80122_0141	Lysyl aminopeptidase (EC 3.4.11.15)
VBICanDiv80122_0247	membrane protein
VBICanDiv80122_0369	membrane protein putative
VBICanDiv80122_0024	metallophosphoesterase
VBICanDiv80122_0463	Methionyl-tRNA synthetase (EC 6.1.1.10)
VBICanDiv80122_0454	Methylenetetrahydrofolate dehydrogenase (NADP+) (EC 1.5.1.5) / Methenyltetrahydrofolate cyclohydrolase (EC 3.5.4.9)
VBICanDiv33328_0021	NAD-specific glutamate dehydrogenase (EC 1.4.1.2)
VBICanDiv33328_0020	NAD-specific glutamate dehydrogenase (EC 1.4.1.2)

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VBICanDiv80122_0319	O-antigen export system permease protein RfbD
VBICanDiv80122_0029	Oligopeptide ABC transporter periplasmic oligopeptide-binding protein OppA (TC 3.A.1.5.1)
VBICanDiv80122_0280	Ornithine carbamoyltransferase (EC 2.1.3.3)
VBICanDiv80122_0065	Oxidoreductase N-terminal:Oxidoreductase C-terminal
VBICanDiv33328_0011	Peptidoglycan N-acetylglucosamine deacetylase (EC 3.5.1.-)
VBICanDiv80122_0456	Phosphoglycerate kinase (EC 2.7.2.3)
VBICanDiv80122_0270	Probable phage protein
VBICanDiv80122_0438	proposed amino acid ligase found clustered with an amidotransferase
VBICanDiv80122_0189	protein of unknown function UPF0118
VBICanDiv80122_0089	putative peptidase family M23/M37 protein
VBICanDiv80122_0244	Putative ROK-family transcriptional regulator
VBICanDiv80122_0455	Pyruvate kinase (EC 2.7.1.40)
VBICanDiv80122_0167	Replicative DNA helicase (EC 3.6.1.-) [SA14-24]
VBICanDiv80122_0355	Ribonucleotide reductase transcriptional regulator NrdR
VBICanDiv80122_0290	Ribosomal large subunit pseudouridine synthase B (EC 5.4.99.-)
VBICanDiv80122_0448	Serine hydroxymethyltransferase (EC 2.1.2.1)
VBICanDiv80122_0294	similar to carbon monoxide dehydrogenase nickel insertion protein
VBICanDiv80122_0069	Single-stranded DNA-binding protein
VBICanDiv80122_0415	SSU ribosomal protein S11p (S14e)
VBICanDiv80122_0309	SSU ribosomal protein S14p (S29e)
VBICanDiv80122_0242	SSU ribosomal protein S1p
VBICanDiv80122_0308	SSU ribosomal protein S8p (S15Ae)
VBICanDiv33328_0027	Succinyl-CoA ligase [ADP-forming] alpha chain (EC 6.2.1.5)
VBICanDiv80122_0322	Succinyl-CoA ligase [ADP-forming] alpha chain (EC 6.2.1.5)
VBICanDiv80122_0470	Sulfate permease
VBICanDiv80122_0318	Teichoic acid export ATP-binding protein TagH (EC 3.6.3.40)
VBICanDiv80122_0227	Thymidylate synthase (EC 2.1.1.45)
VBICanDiv80122_0332	Transketolase C-terminal section (EC 2.2.1.1)
VBICanDiv80122_0386	Translation elongation factor LepA
VBICanDiv80122_0445	Trehalose-6-phosphate hydrolase (EC 3.2.1.93)
VBICanDiv80122_0457	Triosephosphate isomerase (EC 5.3.1.1)
VBICanDiv80122_0371	tRNA-guanine transglycosylase (EC 2.4.2.29)
VBICanDiv80122_0469	tRNA-specific 2-thiouridylase MnmA
VBICanDiv80122_0289	two-component response regulator
VBICanDiv80122_0179	two-component sensor histidine kinase
VBICanDiv80122_0431	Type IV fimbrial assembly ATPase PilB
VBICanDiv80122_0430	Type IV fimbrial assembly protein PilC
VBICanDiv80122_0090	type IV secretory pathway VirB4 components-like protein

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VBICanDiv80122_0352	UDP-glucose 4-epimerase (EC 5.1.3.2)
VBICanDiv80122_0450	UDP-N-acetylenolpyruvoylglucosamine reductase (EC 1.1.1.158)