

List of DEGs from *T.neapolitan* subjected to an enriched CO₂-atmosphere compared to control, obtained by an RNA seq. Up- ($\geq 1,5$) and down-regulated genes ($\leq 1,5$) are highlighted in red and green, respectively.

ID	Fold_Change	Description
CTN_RS00260	26,887	DUF (domain with unknowk function)
CTN_RS03985	26,809	Cold-shock DNA-binding protein family
CTN_RS00505	23,243	Ferritin, Dps family protein
CTN_RS07610	21,327	ATP phosphoribosyltransferase regulatory subunit
CTN_RS06555	21,313	Binding-protein-dependent transport systems inner membrane component precursor
CTN_RS06240	21,180	CTN_trnaMet1
CTN_RS08140	20,956	Glutamine synthetase
CTN_RS08775	19,567	Lipopolysaccharide biosynthesis protein
CTN_RS04295	19,505	Cold shock-like protein
CTN_RS05985	19,235	CTN_trnaLeu5
CTN_RS08835	19,027	peroxiredoxin
CTN_RS08780	18,866	CTN_trnaLeu3
CTN_RS08875	17,039	BioY protein
CTN_RS01090	16,961	CTN_trnaMet2
CTN_RS08870	16,459	2-nitropropane dioxygenase, NPL
CTN_RS06455	16,234	5-methyltetrahydropteroyltriglutamate--homocysteine methyltransferase
CTN_RS06560	15,115	Phosphate ABC transporter, inner membrane subunit PstA
CTN_RS05450	14,615	CTN_trnaPro2
CTN_RS04690	14,499	CTN_trnaAsp1
CTN_RS01310	14,158	Nitrogen regulatory protein P-II
CTN_RS08865	14,092	(3R)-hydroxymyristoyl-(acyl carrier protein) dehydratase
CTN_RS06550	13,643	Phosphate ABC transporter, periplasmic phosphate-binding protein
CTN_RS01315	13,365	Ammonium transporter
CTN_RS07615	12,399	ATP phosphoribosyltransferase
CTN_RS02695	12,314	Putative uncharacterized protein
CTN_RS08860	12,236	3-oxoacyl-(Acyl carrier protein) synthase II
CTN_RS07250	12,048	Transcriptional regulator, SARF family
CTN_RS04795	12,015	Aspartate-semialdehyde dehydrogenase
CTN_RS07790	12,003	Putative uncharacterized protein precursor
CTN_RS06940	11,567	CTN_trnaAsn1

CTN_RS00560	10,768	Acetolactate synthase, small subunit
CTN_RS08275	10,658	Phosphate permease
CTN_RS08880	10,595	Malonyl CoA-acyl carrier protein transacylase
CTN_RS00910	10,464	CTN_trnaLeu1
CTN_RS08030	10,448	1-(5-phosphoribosyl)-5-amino-4-imidazole-carboxylate (AIR) carboxylase
CTN_RS05465	10,167	Putative uncharacterized protein precursor
CTN_RS08035	10,122	Hypothetical Protein
CTN_RS02405	9,833	PP-loop domain protein
CTN_RS07140	9,528	Binding-protein-dependent transport systems inner membrane component
CTN_RS07795	9,204	Putative uncharacterized protein precursor
CTN_RS08025	8,840	PP-loop domain protein
CTN_RS04800	8,811	Diaminopimelate epimerase
CTN_RS02555	8,744	CTN_trnaAla2
CTN_RS07125	8,670	Oligopeptide/dipeptide ABC transporter, ATPase subunit
CTN_RS07120	8,595	Oligopeptide ABC transporter, permease protein
CTN_RS09115	8,553	Glycoside hydrolase, family 4
CTN_RS00200	8,389	Putative uncharacterized protein
CTN_RS01610	8,305	Phospho-2-dehydro-3-deoxyheptonate aldolase
CTN_RS00565	8,300	Acetolactate synthase
CTN_RS01075	8,136	CTN_trnaTyr1
CTN_RS01340	8,039	glutamine amidotransferase, class-II
CTN_RS03220	7,999	FeoA family protein
CTN_RS07130	7,879	Oligopeptide ABC transporter, ATP-binding protein
CTN_RS06530	7,653	Putative uncharacterized protein
CTN_RS01745	7,622	Membrane protein-like protein
CTN_RS08970	7,581	Alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen
CTN_RS09100	7,529	MBL fold metallo-hydrolase
CTN_RS06525	7,516	Biotin synthetase
CTN_RS01360	7,476	Glutamate synthase (NADPH) GltB3 subunit
CTN_RS01350	7,407	4Fe-4Sferredoxin, iron-sulfur binding domain protein
CTN_RS00525	7,218	3-isopropylmalate dehydrogenase
CTN_RS04810	7,213	Dihydrodipicolinate reductase
CTN_RS00950	7,169	CTN_trnaSer1

CTN_RS06235	7,122	CTN_trnaGly3
CTN_RS05515	7,108	Rubrerythrin
CTN_RS08960	7,107	Glycosidase
CTN_RS01085	7,082	CTN_trnaMet3
CTN_RS00330	7,078	Amino acid ABCtransporter, ATP-binding protein
CTN_RS07625	6,990	Histidinol-phosphate aminotransferase
CTN_RS01735	6,829	Cation-transporting ATPase, P-type
CTN_RS01730	6,796	Ubiquinone/menaquinone biosynthesis-related protein
CTN_RS03865	6,690	Putative uncharacterized protein
CTN_RS08770	6,567	Uracil-xanthine permease
CTN_RS04815	6,538	2,3,4,5-tetrahydropyridine-2-carboxylate N-succinyltransferase-related protein
CTN_RS04290	6,507	CTN_trnaAla1
CTN_RS04300	6,499	50Sribosomal protein L31
CTN_RS03990	6,486	Glutamyl-tRNA synthetase 2
CTN_RS00535	6,423	3-isopropylmalate dehydratase large subunit 2
CTN_RS00530	6,400	3-isopropylmalate dehydratase small subunit 2
CTN_RS06535	6,395	[FeFe] hydrogenase H-cluster radical SAM maturase HydC
CTN_RS01070	6,384	CTN_trnaTrp1
CTN_RS07620	6,360	Histidinol dehydrogenase
CTN_RS07145	6,355	Isocitrate dehydrogenase
CTN_RS04305	6,323	tRNA binding S1 domain protein
CTN_RS05920	6,266	Antibiotic ABCtransporter, ATP-binding protein
CTN_RS07800	6,257	Putative uncharacterized protein
CTN_RS01940	6,159	Citrate synthase
CTN_RS06520	6,151	Cystathionine gamma-synthase
CTN_RS04395	6,143	sulfatase
CTN_RS08145	6,102	hypothetical protein
CTN_RS00265	6,097	30Sribosomal protein S18
CTN_RS08455	6,076	Homoserine O-succinyltransferase
CTN_RS09105	6,005	Oxidoreductase
CTN_RS01345	5,985	Glutamate synthase (NADPH) GltB2 subunit
CTN_RS06540	5,976	iron-only hydrogenase system regulator
CTN_RS08225	5,961	ferredoxin

CTN_RS05860	5,955	Thioredoxin
CTN_RS06070	5,937	CTN_trnaCys1
CTN_RS06095	5,923	FeSassembly protein SufC
CTN_RS01595	5,912	shikimate dehydrogenase
CTN_RS01750	5,902	YHSdomain protein
CTN_RS00550	5,832	Dihydroxy-acid dehydratase
CTN_RS06100	5,824	Iron-regulated ABCtransporter membrane component SufE
CTN_RS00625	5,771	Cation efflux system protein
CTN_RS06090	5,738	cysteine desulfurase
CTN_RS04885	5,721	30Sribosomal protein S12
CTN_RS04910	5,691	50Sribosomal protein L3
CTN_RS04915	5,655	50Sribosomal protein L4
CTN_RS00325	5,646	Amino acid ABCtransporter, permease protein
CTN_RS09110	5,604	Menaquinone biosynthesis methyltransferase ubiE
CTN_RS07530	5,564	Major facilitator superfamily MFS_1
CTN_RS04550	5,535	V-ATPase D-subunit
CTN_RS04895	5,526	Elongation factor G
CTN_RS00750	5,522	Prolyl-tRNA synthetase
CTN_RS07910	5,512	Putative uncharacterized protein
CTN_RS07115	5,503	6-phosphogluconolactonase
CTN_RS07180	5,500	Branched chain amino acid ABCtransporter, permease protein
CTN_RS01740	5,457	Alkylhydroperoxidase like protein, AhpD family
CTN_RS00005	5,410	Cupin 2, conserved barrel domain protein
CTN_RS01040	5,406	50Sribosomal protein L7/L12
CTN_RS07175	5,359	Branched chain amino acid ABCtransporter, permease protein
CTN_RS09475	5,333	Peptidase M50
CTN_RS01355	5,302	NADH oxidase
CTN_RS00540	5,278	2-isopropylmalate synthase
CTN_RS00555	5,268	Ketol-acid reductoisomerase
CTN_RS08450	5,215	O-acetylhomoserine sulfhydrylase
CTN_RS04825	5,184	Diaminopimelate decarboxylase
CTN_RS07155	5,141	Cytochrome C-type biogenesis protein
CTN_RS05460	5,030	Putative uncharacterized protein

CTN_RS04880	5,029	Putative uncharacterized protein
CTN_RS07025	4,980	Transcriptional regulator, O ₂ p/Fnr family
CTN_RS00465	4,972	Putative uncharacterized protein
CTN_RS06450	4,932	Cupin 2, conserved barrel domain protein
CTN_RS06430	4,917	Multidrug resistance protein
CTN_RS01600	4,895	3-phosphoshikimate 1-carboxyvinyltransferase
CTN_RS07110	4,842	Glucose-6-phosphate 1-dehydrogenase
CTN_RS00470	4,831	Sugar fermentation stimulation protein like protein
CTN_RS00275	4,829	30S ribosomal protein S6
CTN_RS01605	4,823	Prephenate dehydrogenase
CTN_RS00500	4,810	Magnesium transport protein corA
CTN_RS03365	4,774	Hypothetical Protein
CTN_RS05930	4,739	Aspartate aminotransferase
CTN_RS05915	4,715	Antibiotic ABC transporter, transmembrane protein
CTN_RS00515	4,697	Carbamoyl-phosphate synthase small chain
CTN_RS04905	4,696	30S ribosomal protein S10
CTN_RS03075	4,678	Iron(III) ABC transporter, ATP-binding protein
CTN_RS00545	4,676	putative alpha-isopropylmalate/homocitrate synthase family transferase
CTN_RS03215	4,657	Iron(II) transport protein E
CTN_RS07900	4,646	Redox-active disulfide protein 2
CTN_RS00015	4,630	Spermidine synthase
CTN_RS05455	4,598	CTN_trnaGlu1
CTN_RS08600	4,517	Translation factor SUA5
CTN_RS00915	4,461	CTN_trnaGly1
CTN_RS05925	4,449	D-isomer specific 2-hydroxyacid dehydrogenase, NAD-binding
CTN_RS02785	4,417	Tryptophan synthase alpha chain
CTN_RS04920	4,410	50S ribosomal protein L23
CTN_RS04280	4,407	CTN_trnaLys2
CTN_RS04520	4,404	Putative A-ATPase I-subunit
CTN_RS05835	4,391	CTN_trnaPhe1
CTN_RS09060	4,364	30S ribosomal protein S2
CTN_RS07185	4,331	Branched chain amino acid ABC transporter, periplasmic amino acid-binding protein
CTN_RS03745	4,290	Riboflavin biosynthesis protein RibC

CTN_RS08760	4,256	tRNA-Ser
CTN_RS01335	4,234	CTN_trnaGln1
CTN_RS01935	4,201	3-isopropylmalate dehydratase large subunit 1
CTN_RS01080	4,184	CTN_trnaThr2
CTN_RS04790	4,177	hypothetical protein
CTN_RS00095	4,175	DUF1659 domain-containing protein
CTN_RS09560	4,163	Serine acetyltransferase
CTN_RS06215	4,144	Inosine-5'-monophosphate dehydrogenase
CTN_RS00475	4,116	Conserved protein/domain typically associated with flavoprotein oxygenase DIM6/NTAB family-like protein
CTN_RS09480	4,056	Polysaccharide pyruvyl transferase
CTN_RS04545	4,036	V-ATPase B-subunit
CTN_RS00755	4,035	ComM protein
CTN_RS03685	4,020	Dinitrogenase iron-molybdenum cofactor biosynthesis protein
CTN_RS04820	3,976	Aspartokinase
CTN_RS00920	3,922	Putative uncharacterized protein
CTN_RS03070	3,916	Iron(III) ABC transporter, permease protein
CTN_RS00495	3,902	Methyltransferase type 11
CTN_RS05525	3,895	1,4-dihydroxy-2-naphthoate octaprenyltransferase
CTN_RS08135	3,865	Putative uncharacterized protein
CTN_RS01585	3,823	Bifunctional shikimate kinase/3-dehydroquinate synthase
CTN_RS07085	3,809	Putative uncharacterized protein
CTN_RS04900	3,791	Elongation factor Tu
CTN_RS05875	3,785	Putative uncharacterized protein
CTN_RS04955	3,783	30S ribosomal protein S17
CTN_RS04285	3,774	CTN_trnaArg5
CTN_RS04805	3,768	Dihydrodipicolinate synthase
CTN_RS00010	3,763	S-adenosylmethionine decarboxylase proenzyme
CTN_RS08920	3,747	Phosphomethylpyrimidine kinase type-1
CTN_RS03705	3,726	GMP synthase
CTN_RS05990	3,719	CTN_trnaVal3
CTN_RS04945	3,714	50S ribosomal protein L16
CTN_RS09065	3,711	Major facilitator superfamily MFS_1
CTN_RS01530	3,709	Nitroreductase

CTN_RS06065	3,696	Spermidine/putrescine ABC transporter, periplasmic spermidine/putrescine-binding protein
CTN_RS08605	3,695	CTN_trnaLeu4
CTN_RS05900	3,683	Argininosuccinate lyase
CTN_RS08965	3,665	Putative uncharacterized protein
CTN_RS00520	3,651	Carbamoyl-phosphate synthase large chain
CTN_RS06105	3,618	FeS assembly ATPase SufC
CTN_RS00570	3,616	Aspartokinase II
CTN_RS07890	3,614	Heavy metal resistance transcription regulator
CTN_RS01485	3,606	Arginine repressor
CTN_RS07350	3,568	dTMP kinase
CTN_RS07135	3,540	Oligopeptide ABC transporter, periplasmic oligopeptide-binding protein
CTN_RS00250	3,527	Putative uncharacterized protein
CTN_RS02780	3,518	Tryptophan synthase beta chain 1
CTN_RS01590	3,514	Chorismate synthase
CTN_RS05905	3,502	Argininosuccinate synthase
CTN_RS05055	3,500	50S ribosomal protein L17
CTN_RS05150	3,479	50S ribosomal protein L13
CTN_RS04000	3,479	Radical SAM domain protein
CTN_RS08560	3,463	Protein-export membrane protein SecD precursor
CTN_RS03740	3,460	Riboflavin synthase, alpha subunit
CTN_RS00580	3,432	Homoserine kinase
CTN_RS04985	3,419	50S ribosomal protein L6
CTN_RS04960	3,418	50S ribosomal protein L14
CTN_RS04780	3,413	Hypothetical Protein
CTN_RS08730	3,407	ABC transporter ATP-binding protein
CTN_RS07080	3,401	Esterase
CTN_RS04965	3,394	50S ribosomal protein L24
CTN_RS00270	3,389	Single-stranded DNA-binding protein
CTN_RS05895	3,367	N-acetyl-gamma-glutamyl-phosphate reductase
CTN_RS08925	3,365	Xylose isomerase domain protein TIM barrel
CTN_RS08570	3,364	Putative uncharacterized protein precursor
CTN_RS00585	3,349	ABC transporter, ATP-binding protein
CTN_RS04530	3,343	V-ATPase G-subunit

CTN_RS09595	3,331	<i>Rubredoxin-type Fe(Oys)4 protein</i>
CTN_RS04540	3,295	<i>V-ATPase A-subunit</i>
CTN_RS05565	3,282	<i>Putative uncharacterized protein</i>
CTN_RS00895	3,256	<i>ABCtransporter related</i>
CTN_RS01640	3,254	<i>dihydroorotase</i>
CTN_RS00480	3,253	<i>Major facilitator superfamily MFS_1</i>
CTN_RS09585	3,237	<i>Putative uncharacterized protein</i>
CTN_RS08555	3,225	<i>Protein-export membrane protein SecF</i>
CTN_RS04950	3,218	<i>50Sribosomal protein L29</i>
CTN_RS04260	3,217	<i>Cobyrinic acid a,c-diamide synthase</i>
CTN_RS06055	3,217	<i>Spermidine/putrescine ABCtransporter, permease protein</i>
CTN_RS08845	3,216	<i>Lipophilic protein</i>
CTN_RS09565	3,209	<i>Cysteine synthase</i>
CTN_RS04785	3,205	<i>CTN_trnaSer3</i>
CTN_RS05265	3,196	<i>Glycerol uptake operon antiterminator</i>
CTN_RS06220	3,170	<i>Peptidase M16 domain protein</i>
CTN_RS04980	3,164	<i>30Sribosomal protein S8</i>
CTN_RS03600	3,160	<i>Sadenosylmethionine synthetase</i>
CTN_RS05890	3,152	<i>Arginine biosynthesis bifunctional protein arg.</i>
CTN_RS01100	3,152	<i>Putative uncharacterized protein</i>
CTN_RS08930	3,145	<i>Thiamine biosynthesis protein thiC</i>
CTN_RS04200	3,139	<i>Elongation factor Ts</i>
CTN_RS09590	3,106	<i>Putative uncharacterized protein</i>
CTN_RS06060	3,104	<i>Spermidine/putrescine import ATP-binding protein potA</i>
CTN_RS06925	3,096	<i>Galactokinase</i>
CTN_RS08515	3,093	<i>Thioredoxin reductase</i>
CTN_RS05830	3,093	<i>CTN_trnaVal2</i>
CTN_RS08750	3,073	<i>Phenylalanyl-tRNA synthetase beta chain</i>
CTN_RS03385	3,070	<i>Pyruvate synthase subunit porA</i>
CTN_RS03370	3,048	<i>Protein arcB like protein</i>
CTN_RS06050	3,044	<i>Spermidine/putrescine ABCtransporter, permease protein</i>
CTN_RS00370	3,042	<i>Rhomboid family protein precursor</i>
CTN_RS02435	3,042	<i>Putative uncharacterized protein</i>

CTN_RS04400	3,038	Putative uncharacterized protein
CTN_RS05000	3,026	Ribosomal protein L30
CTN_RS09300	3,024	Putative uncharacterized protein
CTN_RS04925	3,010	50S ribosomal protein L2
CTN_RS08390	3,008	Beta-lactamase domain protein
CTN_RS00320	2,997	Amino acid ABC transporter, periplasmic amino acid-binding protein
CTN_RS05155	2,994	30S ribosomal protein S9
CTN_RS03390	2,990	Pyruvate synthase subunit porC
CTN_RS03805	2,977	Beta transducin-related protein
CTN_RS05010	2,968	Preprotein translocase SecY subunit
CTN_RS05145	2,968	Membrane protein-like protein
CTN_RS06920	2,962	Galactose-1-phosphate uridylyltransferase
CTN_RS08840	2,951	O-antigen polymerase
CTN_RS07300	2,950	Subunit of the Multisubunit Na ⁺ /H ⁺ antiporter-like protein
CTN_RS01930	2,943	3-isopropylmalate dehydratase small subunit 1
CTN_RS00365	2,924	Lipopolysaccharide biosynthesis protein BplA
CTN_RS09470	2,919	Tartrate dehydratase beta subunit/Fumarate hydratase class I C-terminal domain-like protein
CTN_RS04515	2,918	H ⁺ transporting two-sector ATPase C(AC39) subunit
CTN_RS04890	2,910	30S ribosomal protein S7
CTN_RS07170	2,909	Branched chain amino acid ABC transporter, ATP-binding protein
CTN_RS08005	2,901	Sensory box histidine kinase
CTN_RS05745	2,898	Signal peptidase I
CTN_RS05385	2,888	hypothetical protein
CTN_RS03290	2,888	Phospholipase/Carboxylesterase precursor
CTN_RS08565	2,881	preprotein translocase, YajC subunit
CTN_RS00575	2,872	Threonine synthase
CTN_RS08935	2,867	Putative thiazole biosynthetic enzyme
CTN_RS00335	2,865	Penicillin-binding protein 2
CTN_RS05310	2,861	Hypothetical Protein
CTN_RS07895	2,858	Permease
CTN_RS06690	2,855	Extracellular solute-binding protein, family 1 precursor
CTN_RS06225	2,847	Polyribonucleotide nucleotidyltransferase
CTN_RS05140	2,840	50S ribosomal protein L27

CTN_RS02745	2,835	<i>CTN_trnaPro3</i>
CTN_RS05005	2,834	<i>50Sribosomal protein L15</i>
CTN_RS01725	2,813	<i>Putative uncharacterized protein</i>
CTN_RS08015	2,810	<i>GCN5-related N-acetyltransferase</i>
CTN_RS04830	2,806	<i>Hydrolase, ama/hipO/hyuC family</i>
CTN_RS09275	2,771	<i>Uracil phosphoribosyltransferase</i>
CTN_RS05275	2,767	<i>Methyl-accepting chemotaxis protein 4</i>
CTN_RS07105	2,757	<i>Phage shock protein C, PspC</i>
CTN_RS04775	2,755	<i>N utilization substance protein A</i>
CTN_RS08375	2,753	<i>Stage V sporulation protein ξ</i>
CTN_RS02115	2,751	<i>50Sribosomal protein L28</i>
CTN_RS01920	2,748	<i>Glutamate 5-kinase</i>
CTN_RS03950	2,744	<i>L-lactate dehydrogenase</i>
CTN_RS00315	2,739	<i>Xanthine/uracil/vitamin C permease</i>
CTN_RS09600	2,736	<i>Putative superoxide reductase</i>
CTN_RS02105	2,731	<i>Metal dependent phosphohydrolase</i>
CTN_RS05050	2,723	<i>DNA-directed RNA polymerase subunit alpha</i>
CTN_RS01645	2,709	<i>dihydroorotate dehydrogenase</i>
CTN_RS00590	2,700	<i>ABC-2 type transporter</i>
CTN_RS01110	2,697	<i>Phosphoribosylaminoimidazole carboxylase catalytic subunit</i>
CTN_RS08500	2,671	<i>Sadenosyl-L-methionine-dependent methyltransferase mraW</i>
CTN_RS02165	2,668	<i>Electron transport complex, PnfABCDGE type, D subunit precursor</i>
CTN_RS02420	2,665	<i>CTN_trnaArg6</i>
CTN_RS08520	2,660	<i>Glutaredoxin-related protein</i>
CTN_RS07305	2,658	<i>Putative uncharacterized protein</i>
CTN_RS05255	2,641	<i>Oxidoreductase</i>
CTN_RS07765	2,639	<i>Methyl-accepting chemotaxis sensory transducer precursor</i>
CTN_RS01045	2,635	<i>50Sribosomal protein L10</i>
CTN_RS08370	2,633	<i>Putative uncharacterized protein</i>
CTN_RS02765	2,629	<i>Anthranilate synthase component II</i>
CTN_RS04265	2,620	<i>50Sribosomal protein L20</i>
CTN_RS01095	2,608	<i>Thymidylate synthase thyX</i>
CTN_RS03395	2,608	<i>Pyruvate synthase subunit porC</i>

CTN_RS05560	2,605	<i>Polyprenyl synthetase</i>
CTN_RS08175	2,599	<i>Transcriptional regulator, PadR-like family</i>
CTN_RS01520	2,597	<i>ABC-2 type transporter</i>
CTN_RS08180	2,597	<i>Amidohydrolase</i>
CTN_RS07395	2,565	<i>Potassium uptake protein, TrkH family</i>
CTN_RS06255	2,558	<i>Fieske (2Fe-2S) domain protein</i>
CTN_RS01720	2,548	<i>Putative uncharacterized protein</i>
CTN_RS03680	2,547	<i>ferredoxin family protein</i>
CTN_RS02735	2,544	<i>O-sialoglycoprotein endopeptidase</i>
CTN_RS05335	2,538	<i>SufBD protein</i>
CTN_RS03720	2,534	<i>HflC protein precursor</i>
CTN_RS05120	2,519	<i>Jag protein</i>
CTN_RS02160	2,518	<i>Electron transport complex, FnfABODGE type, G subunit precursor</i>
CTN_RS05740	2,510	<i>50S ribosomal protein L19</i>
CTN_RS05060	2,505	<i>Transcription termination factor rho</i>
CTN_RS07195	2,503	<i>Putative uncharacterized protein</i>
CTN_RS09280	2,502	<i>Serine hydroxymethyltransferase</i>
CTN_RS04270	2,496	<i>50S ribosomal protein L35</i>
CTN_RS01420	2,491	<i>Glycosyl transferase, group 1</i>
CTN_RS04970	2,489	<i>50S ribosomal protein L5</i>
CTN_RS02110	2,489	<i>Putative uncharacterized protein</i>
CTN_RS07295	2,482	<i>Na⁺/H⁺ antiporter MnhB subunit-related protein</i>
CTN_RS05710	2,474	<i>Signal recognition particle protein</i>
CTN_RS04210	2,469	<i>Major facilitator superfamily MFS_1</i>
CTN_RS06230	2,460	<i>30S ribosomal protein S15</i>
CTN_RS03210	2,453	<i>Putative uncharacterized protein</i>
CTN_RS04845	2,453	<i>Hypothetical Protein</i>
CTN_RS08395	2,450	<i>Undecaprenyl-diphosphatase</i>
CTN_RS03725	2,447	<i>Putative uncharacterized protein</i>
CTN_RS05305	2,440	<i>4Fe-4Sferredoxin, iron-sulfur binding domain protein</i>
CTN_RS04275	2,428	<i>Translation initiation factor IF-3</i>
CTN_RS09605	2,427	<i>Ruberythrin</i>
CTN_RS03375	2,419	<i>oxidoreductase</i>

CTN_RS09260	2,412	<i>Na⁺/Ca⁺ antiporter, CaCA family precursor</i>
CTN_RS04840	2,410	<i>Putative uncharacterized protein</i>
CTN_RS04850	2,406	<i>Sun protein</i>
CTN_RS03545	2,398	<i>Diguanylate cyclase</i>
CTN_RS09465	2,383	<i>Lytic transglycosylase, catalytic precursor</i>
CTN_RS06680	2,380	<i>ATP-dependent DNA helicase</i>
CTN_RS07100	2,379	<i>Putative uncharacterized protein</i>
CTN_RS01370	2,360	<i>Glycosyl transferase, group 1</i>
CTN_RS06665	2,354	<i>Putative uncharacterized protein</i>
CTN_RS04940	2,348	<i>30S ribosomal protein S3</i>
CTN_RS03695	2,336	<i>Chromate transport protein</i>
CTN_RS07280	2,334	<i>Putative uncharacterized protein precursor</i>
CTN_RS05950	2,331	<i>Alanyl-tRNA synthetase</i>
CTN_RS05185	2,324	<i>Hypothetical Protein</i>
CTN_RS02775	2,322	<i>N-(5'-phosphoribosyl)anthranilate isomerase</i>
CTN_RS07150	2,317	<i>Thioredoxin-related protein-like protein precursor</i>
CTN_RS07190	2,312	<i>Putative uncharacterized protein</i>
CTN_RS05880	2,308	<i>aspartate aminotransferase family protein</i>
CTN_RS02770	2,306	<i>Indole-3-glycerol phosphate synthase</i>
CTN_RS06250	2,304	<i>Putative uncharacterized protein precursor</i>
CTN_RS01105	2,303	<i>Phosphoribosylaminoimidazole carboxylase</i>
CTN_RS00645	2,300	<i>RNA polymerase, sigma-24 subunit, ECF subfamily</i>
CTN_RS01925	2,289	<i>Gamma-glutamyl phosphate reductase</i>
CTN_RS08190	2,287	<i>Citrate transporter</i>
CTN_RS05135	2,274	<i>Putative uncharacterized protein</i>
CTN_RS08445	2,271	<i>Type III pantothenate kinase</i>
CTN_RS03065	2,255	<i>Iron(III) ABC transporter, periplasmic-binding protein</i>
CTN_RS06245	2,253	<i>DNA-(Apurinic or apyrimidinic site) lyase / Pyrimidine dimer DNA glycosylase</i>
CTN_RS07540	2,231	<i>Ferredoxin-dependent glutamate synthase</i>
CTN_RS06930	2,231	<i>Diguanylate cyclase</i>
CTN_RS07340	2,223	<i>Phosphodiesterase, MJ0936 family</i>
CTN_RS06425	2,221	<i>Ribonuclease H</i>
CTN_RS07200	2,218	<i>MoxR protein</i>

CTN_RS08895	2,208	<i>Sugar kinase, pfkB family</i>
CTN_RS08715	2,201	<i>MiaB-like tRNA modifying enzyme</i>
CTN_RS03850	2,197	<i>Beta-glucosidase A</i>
CTN_RS06775	2,191	<i>Glutamate synthase, beta subunit</i>
CTN_RS05820	2,190	<i>hypothetical protein</i>
CTN_RS08755	2,190	<i>locus_tag=CTN_RS08755</i>
CTN_RS05345	2,187	<i>Inositol-1-monophosphatase</i>
CTN_RS06635	2,184	<i>Amidophosphoribosyltransferase</i>
CTN_RS05110	2,184	<i>Hypothetical Protein</i>
CTN_RS05065	2,181	<i>Glucokinase</i>
CTN_RS02440	2,164	<i>CTN_trnaGly2</i>
CTN_RS04560	2,160	<i>Putative uncharacterized protein</i>
CTN_RS05610	2,158	<i>CTN_trnaArg4</i>
CTN_RS00655	2,156	<i>Binding-protein-dependent transport systems inner membrane component</i>
CTN_RS09430	2,155	<i>Methyltransferase type 11</i>
CTN_RS07095	2,152	<i>Glutamine amidotransferase class-I</i>
CTN_RS09270	2,142	<i>Ribonuclease F</i>
CTN_RS05695	2,132	<i>Putative uncharacterized protein precursor</i>
CTN_RS03735	2,127	<i>3,4-dihydroxy-2-butanone-4-phosphate synthase/ GTP cyclohydrolase II</i>
CTN_RS08955	2,126	<i>Putative uncharacterized protein</i>
CTN_RS04205	2,123	<i>Uridylate kinase</i>
CTN_RS09285	2,121	<i>Cysteinyl-tRNA synthetase</i>
CTN_RS07345	2,116	<i>ABC-2 type transporter precursor</i>
CTN_RS04975	2,115	<i>30S ribosomal protein S14 type 2</i>
CTN_RS05015	2,113	<i>Adenylate kinase</i>
CTN_RS08980	2,107	<i>Putative uncharacterized protein precursor</i>
CTN_RS03710	2,106	<i>N-glycosylase/ DNA lyase</i>
CTN_RS04525	2,092	<i>V-ATPase F-subunit</i>
CTN_RS09570	2,088	<i>Putative uncharacterized protein</i>
CTN_RS00280	2,087	<i>Iron-dependent transcriptional repressor</i>
CTN_RS05350	2,084	<i>Beta-fructosidase</i>
CTN_RS02095	2,084	<i>D-alanine--D-alanine ligase</i>
CTN_RS05945	2,080	<i>Phosphatidate cytidyltransferase</i>

CTN_RS00985	2,068	Uncharacterized protein
CTN_RS01035	2,068	DNA-directed RNA polymerase subunit beta
CTN_RS08380	2,065	Galactose-1-phosphate uridylyltransferase
CTN_RS00360	2,060	Putative uncharacterized protein
CTN_RS01470	2,057	MFS transporter
CTN_RS02880	2,056	Radical SAM domain protein
CTN_RS09295	2,055	Biotin/lipoyl attachment domain-containing protein
CTN_RS06495	2,046	Putative uncharacterized protein
CTN_RS09305	2,045	Propionyl-CoA carboxylase, beta subunit
CTN_RS08220	2,044	Uncharacterized protein
CTN_RS06005	2,043	Dephospho-CoA kinase
CTN_RS07020	2,042	Hydroxylamine reductase
CTN_RS05125	2,029	Cupin 2, conserved barrel domain protein
CTN_RS04835	2,026	Ferric uptake regulation protein
CTN_RS00410	2,015	GCN5-related N-acetyltransferase
CTN_RS04555	2,014	Alanyl-tRNA synthetase-related protein
CTN_RS03955	2,011	Cobalt transport protein
CTN_RS02475	2,009	CTN_trnaAla3
CTN_RS07310	2,009	Putative uncharacterized protein
CTN_RS07245	2,001	Flagellar hook-associated protein 2
CTN_RS05100	1,993	50S ribosomal protein L34
CTN_RS03605	1,988	30S ribosomal protein S20
CTN_RS02675	1,986	Putative uncharacterized protein precursor
CTN_RS08150	1,984	Putative uncharacterized protein precursor
CTN_RS07980	1,980	SrA family protein
CTN_RS01005	1,972	Putative uncharacterized protein
CTN_RS07275	1,966	Putative uncharacterized protein precursor
CTN_RS07845	1,965	Major facilitator superfamily MFS_1 precursor
CTN_RS07010	1,962	Ferredoxin
CTN_RS05720	1,962	Hypothetical Protein
CTN_RS07390	1,951	Histidyl-tRNA synthetase
CTN_RS00675	1,947	Methionyl-tRNA formyltransferase
CTN_RS06500	1,946	Aspartyl/glutamyl-tRNA(Asn/Gln) amidotransferase subunit E

CTN_RS02760	1,945	<i>Anthranilate synthase component 1</i>
CTN_RS07400	1,941	<i>TrkA-N domain protein</i>
CTN_RS00405	1,938	<i>Pyrroline-5-carboxylate reductase</i>
CTN_RS02155	1,927	<i>Electron transport complex, FnfABODGE type, Esubunit</i>
CTN_RS00445	1,918	<i>Signal recognition particle-docking protein FtsY</i>
CTN_RS05070	1,912	<i>DegV family protein</i>
CTN_RS08805	1,909	<i>Glutamine-fructose-6-phosphate transaminase</i>
CTN_RS09120	1,908	<i>CTN_trnaGln2</i>
CTN_RS05045	1,892	<i>30S ribosomal protein S4</i>
CTN_RS04535	1,889	<i>V-ATPase E-subunit</i>
CTN_RS01650	1,889	<i>Dihydroorotate dehydrogenase</i>
CTN_RS05180	1,888	<i>hypothetical protein</i>
CTN_RS06075	1,881	<i>Phosphoglycerate mutase</i>
CTN_RS09620	1,874	<i>Putative uncharacterized protein precursor</i>
CTN_RS06355	1,873	<i>Tetratricopeptide TPR_2 repeat protein</i>
CTN_RS00255	1,872	<i>Beta-lactamase domain protein</i>
CTN_RS04415	1,868	<i>Transcriptional repressor nrdF</i>
CTN_RS00885	1,867	<i>ABC transporter, permease protein, cystTW family</i>
CTN_RS07605	1,863	<i>Citrate transporter</i>
CTN_RS00995	1,859	<i>Regulatory protein</i>
CTN_RS02235	1,858	<i>UDP-N-acetylmuramate-L-alanine ligase</i>
CTN_RS04495	1,854	<i>Amidohydrolase</i>
CTN_RS07410	1,850	<i>Rhomboid family protein</i>
CTN_RS07355	1,850	<i>Ornithine carbamoyltransferase</i>
CTN_RS08940	1,849	<i>Putative uncharacterized protein</i>
CTN_RS04935	1,847	<i>50S ribosomal protein L22</i>
CTN_RS01845	1,840	<i>Glucose-6-phosphate isomerase</i>
CTN_RS02740	1,840	<i>Regulatory protein, FmdB family</i>
CTN_RS05980	1,838	<i>Putative uncharacterized protein</i>
CTN_RS05280	1,833	<i>Redox-sensing transcriptional repressor rex 2</i>
CTN_RS00650	1,824	<i>Binding-protein-dependent transport systems inner membrane component</i>
CTN_RS06670	1,823	<i>GTP-binding protein YchF</i>
CTN_RS02100	1,822	<i>DNA topoisomerase 1</i>

CTN_RS08170	1,820	Methyltransferase type 11
CTN_RS07205	1,819	Aminotransferase
CTN_RS03450	1,813	DNA helicase
CTN_RS04700	1,810	Transketolase
CTN_RS05115	1,809	Inner membrane protein oxaA
CTN_RS02480	1,807	Putative iron(III) ABC transporter, ATP-binding protein
CTN_RS01575	1,795	Lysine exporter protein (LYSE/YGGA) precursor
CTN_RS01050	1,793	50S ribosomal protein L1
CTN_RS04185	1,792	DegV family protein
CTN_RS06915	1,786	Alpha-galactosidase
CTN_RS01525	1,784	ABC-2 type transporter
CTN_RS07210	1,784	Phosphate acetyltransferase
CTN_RS05285	1,777	Fe-hydrogenase alpha subunit
CTN_RS02085	1,776	Phosphate permease
CTN_RS03715	1,775	HflK protein precursor
CTN_RS04020	1,771	Glutamate synthase, beta subunit
CTN_RS02620	1,768	Leucyl-tRNA synthetase
CTN_RS07075	1,765	Response regulator receiver protein
CTN_RS06415	1,762	Putative uncharacterized protein
CTN_RS05550	1,758	4Fe-4S ferredoxin iron-sulfur binding domain protein
CTN_RS06280	1,756	ABC transporter ATP-binding protein
CTN_RS08385	1,754	glycogen synthase
CTN_RS04015	1,753	Dihydrofolate reductase
CTN_RS06335	1,750	hypothetical protein
CTN_RS07650	1,749	Histidine biosynthesis bifunctional protein hisE
CTN_RS02040	1,749	Methylenetetrahydrofolate reductase
CTN_RS04360	1,746	Type IV prepilin peptidase
CTN_RS00890	1,743	Pyrimidine biosynthesis enzyme
CTN_RS03730	1,743	6,7-dimethyl-8-ribityllumazine synthase
CTN_RS02690	1,742	Prephenate dehydratase
CTN_RS02515	1,736	Phosphoglucosamine mutase
CTN_RS08830	1,734	Transcriptional regulator XylF
CTN_RS00980	1,734	Integral membrane protein-like protein

CTN_RS04505	1,730	<i>Metallophosphoesterase</i>
CTN_RS09265	1,724	<i>Putative uncharacterized protein</i>
CTN_RS02670	1,721	<i>Prolipoprotein diacylglycerol transferase</i>
CTN_RS06000	1,708	<i>Methyltransferase</i>
CTN_RS05030	1,707	<i>Hypothetical Protein</i>
CTN_RS06910	1,706	<i>beta-galactosidase</i>
CTN_RS03590	1,698	<i>Peptidase M23B precursor</i>
CTN_RS00825	1,698	<i>Putative uncharacterized protein</i>
CTN_RS03380	1,696	<i>Pyruvate synthase subunit porE</i>
CTN_RS00835	1,695	<i>PhoH-related protein</i>
CTN_RS04770	1,690	<i>Ferric uptake regulation protein</i>
CTN_RS05545	1,687	<i>FAD dependent oxidoreductase precursor</i>
CTN_RS06285	1,687	<i>ABC transporter, ATP-binding protein</i>
CTN_RS05380	1,685	<i>Putative uncharacterized protein precursor</i>
CTN_RS08525	1,682	<i>Putative uncharacterized protein</i>
CTN_RS00285	1,679	<i>Putative uncharacterized protein</i>
CTN_RS02615	1,678	<i>Putative uncharacterized protein</i>
CTN_RS05635	1,678	<i>Putative uncharacterized protein</i>
CTN_RS03700	1,676	<i>Chromate transport protein</i>
CTN_RS00340	1,676	<i>Putative uncharacterized protein precursor</i>
CTN_RS00065	1,675	<i>Putative uncharacterized protein</i>
CTN_RS07525	1,664	<i>Putative uncharacterized protein</i>
CTN_RS06330	1,662	<i>Hypothetical Protein</i>
CTN_RS02490	1,657	<i>Putative iron(III) ABC transporter, periplasmic iron-binding protein</i>
CTN_RS05035	1,655	<i>30S ribosomal protein S13</i>
CTN_RS01055	1,652	<i>50S ribosomal protein L11</i>
CTN_RS01540	1,652	<i>Anaerobic ribonucleoside-triphosphate reductase activating protein</i>
CTN_RS04190	1,642	<i>Sigma 54 modulation protein / SSU ribosomal protein S30F</i>
CTN_RS08575	1,641	<i>Riboflavin kinase/FMN adenylyltransferase</i>
CTN_RS04470	1,639	<i>Ribulose-phosphate 3-epimerase</i>
CTN_RS06370	1,637	<i>hypothetical protein</i>
CTN_RS01535	1,636	<i>Anaerobic ribonucleoside-triphosphate reductase class III</i>
CTN_RS01950	1,634	<i>ABC transporter, transmembrane region</i>

CTN_RS06640	1,634	Phosphoribosylformylglycinamide synthase II
CTN_RS07235	1,632	Putative uncharacterized protein
CTN_RS08790	1,631	Transcriptional regulator, MarR family
CTN_RS08800	1,628	N-acetylglucosamine-6-phosphate deacetylase
CTN_RS00880	1,627	Putative uncharacterized protein
CTN_RS08855	1,626	histidinol-phosphatase
CTN_RS00025	1,622	Putative uncharacterized protein
CTN_RS05270	1,621	Glycerol kinase 2
CTN_RS05700	1,620	MscSMechanosensitive ion channel
CTN_RS01510	1,618	Putative uncharacterized protein precursor
CTN_RS05885	1,612	Acetylglutamate kinase
CTN_RS02855	1,611	Ferric uptake regulation protein
CTN_RS00635	1,611	Putative uncharacterized protein
CTN_RS03935	1,609	Uncharacterized protein
CTN_RS00975	1,609	putative diguanylate cyclase
CTN_RS00400	1,607	CTN_trna ^{Thr3}
CTN_RS01030	1,602	DNA-directed RNA polymerase subunit beta'
CTN_RS04860	1,600	Uncharacterized conserved protein
CTN_RS01840	1,598	Betaine-aldehyde dehydrogenase
CTN_RS01450	1,587	4-alpha-glucanotransferase
CTN_RS08440	1,582	Methyltransferase
CTN_RS02595	1,582	Reverse gyrase
CTN_RS04405	1,582	Lysyl-tRNA synthetase
CTN_RS05040	1,579	30S ribosomal protein S11
CTN_RS07670	1,577	Glutaredoxin-like protein, YruB-family
CTN_RS03995	1,576	Phosphodiesterase, MJ0936 family
CTN_RS07320	1,573	NADH/Ubiquinone/plastoquinone (Complex I) precursor
CTN_RS04990	1,570	50S ribosomal protein L18
CTN_RS04410	1,560	Transcription elongation factor greA
CTN_RS00375	1,559	Lipopolysaccharide biosynthesis protein
CTN_RS00810	1,556	Oligopeptide ABC transporter, ATP-binding protein
CTN_RS05330	1,551	ABC transporter, ATP-binding protein
CTN_RS00680	1,548	GTP-binding protein HflX

CTN_RS08700	1,547	DNA gyrase subunit E
CTN_RS09010	1,546	Radical SAM domain protein
CTN_RS00020	1,545	tRNA-i(6)A37 thiotransferase enzyme
CTN_RS02940	1,545	Sugar ABC transporter, permease protein
CTN_RS05730	1,542	tRNA (guanine-N(1)-)-methyltransferase
CTN_RS04195	1,540	Ribonuclease, Phe/Png family
CTN_RS07405	1,537	TrkA-N domain protein precursor
CTN_RS08695	1,536	Putative uncharacterized protein
CTN_RS01825	1,536	Alcohol dehydrogenase GroES domain protein
CTN_RS07415	1,533	Putative uncharacterized protein
CTN_RS03580	1,533	5'-nucleotidase surE
CTN_RS04510	1,532	Putative uncharacterized protein
CTN_RS02865	1,529	Oxidoreductase
CTN_RS04995	1,528	30S ribosomal protein S5
CTN_RS06695	1,523	Binding-protein-dependent transport systems inner membrane component precursor
CTN_RS02485	1,516	Putative, iron(III) ABC transporter, permease protein
CTN_RS08885	1,510	2-phosphosulfolactate phosphatase
CTN_RS04215	1,508	3H domain protein
CTN_RS08215	1,506	Uncharacterized protein
CTN_RS04025	1,502	dihydroorotate dehydrogenase electron transfer subunit
CTN_RS05170	1,500	transcription-repair coupling factor
CTN_RS07645	1,499	Imidazole glycerol phosphate synthase subunit hisF
CTN_RS08510	1,498	Penicillin-binding protein 2
CTN_RS01010	1,497	Chemotaxis protein methyltransferase
CTN_RS03205	1,494	Esterase
CTN_RS04930	1,492	30S ribosomal protein S19
CTN_RS07455	1,490	Putative uncharacterized protein
CTN_RS03125	1,490	Mannonate dehydratase
CTN_RS05955	1,489	Putative uncharacterized protein
CTN_RS07515	1,489	Putative uncharacterized protein
CTN_RS06085	1,487	NifU-like protein
CTN_RS03970	1,485	Putative uncharacterized protein
CTN_RS06655	1,485	phosphoribosylaminoimidazolesuccinocarboxamide synthase

CTN_RS01060	1,483	<i>Transcription antitermination protein nusG</i>
CTN_RS03960	1,482	<i>Peptidase S16, lon domain protein</i>
CTN_RS05130	1,480	<i>50Sribosomal protein L21</i>
CTN_RS08795	1,479	<i>multidrug resistance protein norM</i>
CTN_RS08125	1,476	<i>Putative uncharacterized protein</i>
CTN_RS07315	1,476	<i>Putative uncharacterized protein</i>
CTN_RS05025	1,473	<i>Translation initiation factor IF-1</i>
CTN_RS07635	1,470	<i>Imidazole glycerol phosphate synthase subunit hisH</i>
CTN_RS03965	1,467	<i>Septum site-determining protein minD</i>
CTN_RS06945	1,459	<i>Putative uncharacterized protein</i>
CTN_RS09435	1,451	<i>GatB/Yqey domain protein</i>
CTN_RS05725	1,449	<i>16SrRNA-processing protein rimM</i>
CTN_RS04645	1,448	<i>L-allo-threonine aldolase</i>
CTN_RS02415	1,447	<i>Putative guanosine pentaphosphate phosphohydrolase</i>
CTN_RS02495	1,444	<i>Putative uncharacterized protein</i>
CTN_RS05195	1,443	<i>30Sribosomal protein S1</i>
CTN_RS06360	1,443	<i>type II toxin-antitoxin system HicB family</i>
CTN_RS09540	1,442	<i>Putative uncharacterized protein</i>
CTN_RS00830	1,442	<i>DNA polymerase III, epsilon subunit</i>
CTN_RS02430	1,442	<i>ABC transporter, ATP-binding protein</i>
CTN_RS02045	1,441	<i>methionine synthase</i>
CTN_RS00430	1,441	<i>Apolipoprotein N-acyltransferase</i>
CTN_RS06675	1,429	<i>Acid phosphatase/vanadium-dependent haloperoxidase related</i>
CTN_RS05715	1,425	<i>30Sribosomal protein S16</i>
CTN_RS01325	1,424	<i>Sensor protein</i>
CTN_RS05825	1,420	<i>Diguanylate cyclase</i>
CTN_RS01830	1,418	<i>Putative uncharacterized protein</i>
CTN_RS03235	1,417	<i>Putative uncharacterized protein precursor</i>
CTN_RS01625	1,416	<i>Uncharacterized protein</i>
CTN_RS05160	1,414	<i>DNA primase</i>
CTN_RS08710	1,414	<i>branched-chain-amino-acid aminotransferase</i>
CTN_RS07640	1,406	<i>phosphoribosylformimino-5-aminoimidazole carboxamide ribotide isomerase</i>
CTN_RS04460	1,403	<i>PASTA domain containing protein precursor</i>

CTN_RS01835	1,403	<i>Transcriptional regulator, GntRfamily</i>
CTN_RS09575	1,402	<i>Hydrolase of the metallo-beta-lactamase superfamily-like protein</i>
CTN_RS01675	1,395	<i>M4C-methyltransferase</i>
CTN_RS05190	1,395	<i>ribosome biogenesis GTPase Der</i>
CTN_RS05390	1,389	<i>Putative uncharacterized protein</i>
CTN_RS08945	1,388	<i>Linocin_M18 bacteriocin protein</i>
CTN_RS02150	1,387	<i>Electron transport complex, FnfABCDGEtype, A subunit</i>
CTN_RS01365	1,386	<i>Transcriptional regulator, XylR-related</i>
CTN_RS07360	1,385	<i>Adenylosuccinate synthetase</i>
CTN_RS06585	1,384	<i>ATPase-like protein</i>
CTN_RS04365	1,382	<i>SAM-dependent methyltransferase</i>
CTN_RS01850	1,382	<i>K⁺ channel, beta subunit</i>
CTN_RS05105	1,380	<i>ribonuclease Pprotein component</i>
CTN_RS07050	1,380	<i>Oxygen-independent coproporphyrinogen III oxidase</i>
CTN_RS03425	1,378	<i>Rubrerythrin</i>
CTN_RS08400	1,378	<i>CBSdomain containing protein</i>
CTN_RS08185	1,376	<i>Putative signal-transduction protein with CBSdomains</i>
CTN_RS01015	1,375	<i>Pseudouridine synthase</i>
CTN_RS02260	1,374	<i>Putative uncharacterized protein</i>
CTN_RS07365	1,373	<i>Adenylosuccinate lyase</i>
CTN_RS03585	1,368	<i>Peptide deformylase</i>
CTN_RS09425	1,368	<i>Holo-acyl-carrier-protein synthase</i>
CTN_RS02935	1,368	<i>Nuclease (PecB family)-like protein</i>
CTN_RS06590	1,367	<i>ABCtransporter, ATP-binding protein</i>
CTN_RS02015	1,364	<i>Regulatory protein GntRHT₁</i>
CTN_RS00865	1,363	<i>Putative uncharacterized protein</i>
CTN_RS03910	1,357	<i>Protein recA</i>
CTN_RS09015	1,357	<i>Phosphomannomutase</i>
CTN_RS04620	1,356	<i>Putative uncharacterized protein</i>
CTN_RS05355	1,353	<i>Putative uncharacterized protein</i>
CTN_RS05245	1,350	<i>CoA-binding domain protein</i>
CTN_RS04765	1,349	<i>ComEC/Pec2-related protein</i>
CTN_RS09125	1,348	<i>AAA family ATPase</i>

CTN_RS07520	1,348	<i>Beta-glucuronidase</i>
CTN_RS05225	1,347	<i>Uncharacterized protein</i>
CTN_RS00345	1,346	<i>Putative uncharacterized protein</i>
CTN_RS00780	1,344	<i>recombination factor protein ParA/unknown domain fusion protein</i>
CTN_RS03280	1,344	<i>Putative uncharacterized protein precursor</i>
CTN_RS01665	1,343	<i>Amidohydrolase 3</i>
CTN_RS00450	1,340	<i>Uncharacterized protein</i>
CTN_RS03245	1,340	<i>Aminopeptidase F</i>
CTN_RS05940	1,340	<i>Undecaprenyl pyrophosphate synthetase</i>
CTN_RS00815	1,339	<i>Putative uncharacterized protein</i>
CTN_RS02650	1,338	<i>Putative uncharacterized protein</i>
CTN_RS00075	1,335	<i>Putative uncharacterized protein precursor</i>
CTN_RS00245	1,334	<i>Putative uncharacterized protein</i>
CTN_RS00925	1,331	<i>UvrABC system protein A</i>
CTN_RS08670	1,329	<i>Fbd shape-determining protein FbdA</i>
CTN_RS00805	1,328	<i>Oligopeptide/dipeptide ABC transporter, ATPase subunit</i>
CTN_RS07450	1,327	<i>Ribosomal protein L11 methyltransferase</i>
CTN_RS09460	1,326	<i>DNA polymerase III, gamma and tau subunit</i>
CTN_RS03905	1,326	<i>Regulatory protein recX</i>
CTN_RS00385	1,320	<i>Thioesterase superfamily</i>
CTN_RS02090	1,320	<i>Putative uncharacterized protein</i>
CTN_RS02050	1,318	<i>5-methyltetrahydrofolate S-homocysteine methyltransferase</i>
CTN_RS02520	1,318	<i>Putative uncharacterized protein</i>
CTN_RS04650	1,317	<i>Putative uncharacterized protein</i>
CTN_RS02825	1,315	<i>Oxaloacetate decarboxylase, alpha subunit</i>
CTN_RS07745	1,311	<i>Transcriptional regulator</i>
CTN_RS09410	1,306	<i>ATP-dependent Clp protease proteolytic subunit</i>
CTN_RS06435	1,303	<i>Beta-lactamase domain protein</i>
CTN_RS02665	1,295	<i>Nucleoside-triphosphatase</i>
CTN_RS03155	1,290	<i>Putative uncharacterized protein</i>
CTN_RS09320	1,288	<i>Putative uncharacterized protein</i>
CTN_RS03150	1,285	<i>Uronate isomerase</i>
CTN_RS01115	1,284	<i>Small GTP-binding protein</i>

CTN_RS00855	1,282	<i>Putative uncharacterized protein</i>
CTN_RS06350	1,280	<i>Radical SAM domain protein</i>
CTN_RS05600	1,274	<i>Flagellar basal-body rod protein FlgF</i>
CTN_RS09290	1,273	<i>Purine-binding chemotaxis protein</i>
CTN_RS01120	1,271	<i>Fumarate lyase</i>
CTN_RS01875	1,271	<i>Alpha-xylosidase</i>
CTN_RS02640	1,270	<i>Putative uncharacterized protein</i>
CTN_RS05855	1,267	<i>Putative uncharacterized protein</i>
CTN_RS08405	1,267	<i>4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthase</i>
CTN_RS05290	1,267	<i>Fe-hydrogenase beta subunit</i>
CTN_RS00355	1,267	<i>manganese-dependent inorganic pyrophosphatase</i>
CTN_RS06420	1,266	<i>Aldo/keto reductase</i>
CTN_RS00070	1,264	<i>Clostripain-related protein</i>
CTN_RS00595	1,263	<i>Malate oxidoreductase</i>
CTN_RS05405	1,262	<i>Metal dependent phosphohydrolase</i>
CTN_RS07330	1,261	<i>Putative uncharacterized protein</i>
CTN_RS01330	1,260	<i>Response regulator</i>
CTN_RS03140	1,260	<i>2-dehydro-3-deoxyphosphogluconate aldolase</i>
CTN_RS04095	1,258	<i>UvrB/UvrC protein</i>
CTN_RS09580	1,258	<i>Acyl carrier protein</i>
CTN_RS02055	1,257	<i>tRNA modification GTPase trmE</i>
CTN_RS09545	1,255	<i>Putative uncharacterized protein</i>
CTN_RS02720	1,247	<i>Glucosamine-fructose-6-phosphate aminotransferase</i>
CTN_RS08420	1,247	<i>Thiamine pyrophosphokinase</i>
CTN_RS03660	1,245	<i>Putative uncharacterized protein</i>
CTN_RS03480	1,245	<i>Putative uncharacterized protein</i>
CTN_RS08535	1,243	<i>Putative uncharacterized protein</i>
CTN_RS05690	1,237	<i>Queuine tRNA-ribosyltransferase</i>
CTN_RS00380	1,237	<i>Radical SAM domain protein precursor</i>
CTN_RS03610	1,232	<i>Putative uncharacterized protein</i>
CTN_RS01820	1,232	<i>Putative uncharacterized protein</i>
CTN_RS05300	1,221	<i>Stage II sporulation Efamily protein</i>
CTN_RS03835	1,220	<i>Binding-protein-dependent transport systems inner membrane component</i>

CTN_RS07230	1,216	<i>Putative uncharacterized protein</i>
CTN_RS06905	1,213	<i>ABCtransporter</i>
CTN_RS04455	1,211	<i>Radical SAM enzyme, Cfr family</i>
CTN_RS08310	1,207	<i>Flagellar biosynthetic protein fliF</i>
CTN_RS04865	1,206	<i>Putative metalloprotease</i>
CTN_RS08230	1,199	<i>Protein Homology</i>
CTN_RS02815	1,199	<i>Major facilitator superfamily MFS_1 precursor</i>
CTN_RS04125	1,198	<i>DNA-directed DNA polymerase I</i>
CTN_RS09185	1,196	<i>Metal dependent phosphohydrolase</i>
CTN_RS06205	1,196	<i>Hypothetical Protein</i>
CTN_RS03020	1,196	<i>Putative uncharacterized protein</i>
CTN_RS02730	1,196	<i>ATP-dependent Clp protease ATP-binding subunit clpX</i>
CTN_RS04630	1,193	<i>FNA methyltransferase, TrmH family, group 3</i>
CTN_RS01505	1,193	<i>Propanediol utilization protein</i>
CTN_RS01020	1,192	<i>DNA polymerase III subunit alpha</i>
CTN_RS06440	1,191	<i>Exporter of the FND superfamily-like protein</i>
CTN_RS04490	1,188	<i>Putative uncharacterized protein</i>
CTN_RS05605	1,187	<i>Rbd shape-determining protein MreE</i>
CTN_RS03265	1,186	<i>Queuosine biosynthesis protein QueC</i>
CTN_RS08280	1,186	<i>periplasmic serine protease</i>
CTN_RS03570	1,186	<i>16SrFNA m(2)G 1207 methyltransferase</i>
CTN_RS03640	1,185	<i>Alpha-amylase</i>
CTN_RS07750	1,184	<i>FadRfamily transcriptional regulator</i>
CTN_RS01515	1,184	<i>ABCtransporter related</i>
CTN_RS08850	1,174	<i>PHP domain-containing protein</i>
CTN_RS03630	1,165	<i>Putative uncharacterized protein</i>
CTN_RS03975	1,160	<i>Putative uncharacterized protein</i>
CTN_RS02020	1,159	<i>Acetate kinase</i>
CTN_RS06140	1,147	<i>Twitching motility protein</i>
CTN_RS03025	1,143	<i>ComEprotein</i>
CTN_RS08260	1,143	<i>Iron-containing alcohol dehydrogenase</i>
CTN_RS00800	1,142	<i>Binding-protein-dependent transport systems inner membrane component precursor</i>
CTN_RS03550	1,141	<i>Putative uncharacterized protein precursor</i>

CTN_RS06595	1,140	<i>Aspartate aminotransferase</i>
CTN_RS02215	1,139	<i>Phospho-N-acetylmuramoyl-pentapeptide-transferase</i>
CTN_RS08985	1,138	<i>Translation initiation factor IF-2</i>
CTN_RS03260	1,137	<i>Hypothetical Protein</i>
CTN_RS00820	1,129	<i>Oligopeptide ABC transporter, ATP-binding protein</i>
CTN_RS04635	1,125	<i>NagD protein</i>
CTN_RS03620	1,106	<i>Sensor protein</i>
CTN_RS09020	1,093	<i>Pas superfamily GTP-binding protein YqF</i>
CTN_RS00090	1,085	<i>sugar transporter</i>
CTN_RS08745	-1,109	<i>Transcriptional regulator, TetR family</i>
CTN_RS05595	-1,109	<i>flagellar basal-body rod protein FlgC</i>
CTN_RS02715	-1,110	<i>Fatty acid/phospholipid synthesis protein plsX</i>
CTN_RS05650	-1,115	<i>ApbE family lipoprotein</i>
CTN_RS00960	-1,121	<i>Nicotinic acid phosphoribosyltransferase-like protein</i>
CTN_RS00860	-1,128	<i>NAD-dependent deacetylase</i>
CTN_RS08890	-1,131	<i>Putative uncharacterized protein</i>
CTN_RS08590	-1,140	<i>Metal dependent phosphohydrolase</i>
CTN_RS08295	-1,146	<i>MazG protein</i>
CTN_RS08350	-1,153	<i>RNA polymerase, sigma 28 subunit, FlhA/WhiG</i>
CTN_RS07435	-1,156	<i>LexA repressor</i>
CTN_RS04575	-1,156	<i>Holliday junction ATP-dependent DNA helicase ruvE</i>
CTN_RS00035	-1,158	<i>Putative uncharacterized protein</i>
CTN_RS01980	-1,160	<i>Aldose 1-epimerase</i>
CTN_RS01855	-1,160	<i>Oxidoreductase domain protein</i>
CTN_RS04870	-1,161	<i>Metal dependent phosphohydrolase precursor</i>
CTN_RS05475	-1,162	<i>Putative uncharacterized protein</i>
CTN_RS08585	-1,166	<i>Ribosome-binding factor A</i>
CTN_RS02030	-1,168	<i>Pyruvate, orthophosphate dikinase</i>
CTN_RS04080	-1,170	<i>Ribose-phosphate pyrophosphokinase</i>
CTN_RS08285	-1,173	<i>Ribonuclease</i>
CTN_RS07240	-1,178	<i>Flagellar protein FlhG protein</i>
CTN_RS05785	-1,179	<i>Transcriptional regulator, Fis family</i>
CTN_RS02950	-1,179	<i>Sugar ABC transporter, ATP-binding protein</i>

CTN_RS00485	-1,180	<i>Uncharacterized protein</i>
CTN_RS03010	-1,181	<i>Putative uncharacterized protein</i>
CTN_RS08950	-1,186	<i>radical SAM protein</i>
CTN_RS09225	-1,187	<i>Putative uncharacterized protein</i>
CTN_RS06195	-1,190	<i>Glutamyl-tRNA synthetase 1</i>
CTN_RS05470	-1,191	<i>Major facilitator superfamily MFS_1 precursor</i>
CTN_RS03435	-1,193	<i>Oxidase family protein</i>
CTN_RS02200	-1,193	<i>Putative uncharacterized protein</i>
CTN_RS04170	-1,195	<i>ATP synthase gamma chain</i>
CTN_RS03440	-1,202	<i>Transglutaminase domain protein</i>
CTN_RS08470	-1,203	<i>Pyruvate ferredoxin 2-oxoreductase-related protein</i>
CTN_RS01390	-1,205	<i>Efflux transporter, FND family, MFP subunit precursor</i>
CTN_RS07560	-1,206	<i>ABC transporter related</i>
CTN_RS06855	-1,209	<i>Arabinogalactan endo-1,4-beta-galactosidase precursor</i>
CTN_RS07555	-1,209	<i>Putative uncharacterized protein</i>
CTN_RS06965	-1,209	<i>FleD-related protein</i>
CTN_RS02310	-1,212	<i>Glycyl-tRNA synthetase alpha subunit</i>
CTN_RS09220	-1,213	<i>Putative uncharacterized protein</i>
CTN_RS07585	-1,214	<i>Endoglucanase</i>
CTN_RS06600	-1,214	<i>Phosphorylated carbohydrates phosphatase</i>
CTN_RS06150	-1,219	<i>Response regulator</i>
CTN_RS02605	-1,220	<i>Putative uncharacterized protein</i>
CTN_RS05260	-1,223	<i>FAD dependent oxidoreductase precursor</i>
CTN_RS00350	-1,225	<i>Rbd shape-determining protein MreE</i>
CTN_RS09405	-1,227	<i>Ray-related protein</i>
CTN_RS00610	-1,228	<i>Tryptophan synthase beta chain 2</i>
CTN_RS09190	-1,231	<i>Putative uncharacterized protein</i>
CTN_RS04565	-1,234	<i>3-methyl-2-oxobutanoate hydroxymethyltransferase</i>
CTN_RS00705	-1,236	<i>Putative uncharacterized protein precursor</i>
CTN_RS08320	-1,238	<i>Flagellar biosynthesis protein FlhA</i>
CTN_RS06315	-1,238	<i>ABC transporter related precursor</i>
CTN_RS06460	-1,239	<i>6-phospho-beta-glucosidase bglT</i>
CTN_RS09180	-1,242	<i>Threonyl-tRNA synthetase</i>

CTN_RS00765	-1,243	<i>Phage SPO1 DNA polymerase-related protein</i>
CTN_RS01790	-1,243	<i>ribose ABC transporter, permease protein</i>
CTN_RS08680	-1,249	<i>Type II secretion system protein E</i>
CTN_RS03470	-1,250	<i>CRISPR-associated protein, Csx2 family</i>
CTN_RS00125	-1,251	<i>Hypothetical Protein</i>
CTN_RS03310	-1,251	<i>ROK family protein</i>
CTN_RS08545	-1,255	<i>50S ribosomal protein L9</i>
CTN_RS02570	-1,258	<i>Primosomal protein N</i>
CTN_RS05430	-1,261	<i>Putative uncharacterized protein</i>
CTN_RS07595	-1,262	<i>septum site-determining protein minC</i>
CTN_RS00660	-1,263	<i>Oligopeptide ABC transporter, periplasmic oligopeptide-binding protein</i>
CTN_RS03255	-1,263	<i>Dihydropteroate synthase</i>
CTN_RS00930	-1,264	<i>Protein translocase subunit secE</i>
CTN_RS07260	-1,264	<i>General secretion pathway protein C</i>
CTN_RS00710	-1,272	<i>ATP-dependent hsl protease ATP-binding subunit hslU</i>
CTN_RS08045	-1,272	<i>Putative uncharacterized protein</i>
CTN_RS09390	-1,274	<i>Flagellar biosynthesis protein FljZ</i>
CTN_RS03645	-1,276	<i>Putative uncharacterized protein</i>
CTN_RS03285	-1,276	<i>4Fe-4S ferredoxin iron-sulfur binding domain protein</i>
CTN_RS08410	-1,277	<i>Putative zinc metalloprotease</i>
CTN_RS09415	-1,279	<i>trigger factor</i>
CTN_RS09645	-1,280	<i>Transcriptional regulator, SARP family</i>
CTN_RS03430	-1,281	<i>Hypothetical Protein</i>
CTN_RS04450	-1,283	<i>UDP-N-acetylenolpyruvoylglucosamine reductase</i>
CTN_RS07920	-1,284	<i>Helicase domain protein</i>
CTN_RS07370	-1,284	<i>rNA methyltransferase, TrmA family</i>
CTN_RS05315	-1,288	<i>Myo-inositol-1-phosphate synthase-related protein</i>
CTN_RS04385	-1,288	<i>MATE efflux family protein</i>
CTN_RS03345	-1,290	<i>Beta-glucosidase</i>
CTN_RS01445	-1,291	<i>Putative fibronectin-binding protein</i>
CTN_RS07480	-1,292	<i>Sugar kinase</i>
CTN_RS08900	-1,296	<i>Putative uncharacterized protein</i>
CTN_RS02380	-1,297	<i>ABC-type nitrate/sulfonate/bicarbonate transport systems periplasmic components-like protein precursor</i>

CTN_RS04595	-1,300	<i>Phosphate transport system protein phoU</i>
CTN_RS03305	-1,300	<i>Binding-protein-dependent transport systems inner membrane component</i>
CTN_RS06510	-1,301	<i>Type IV pilin-related protein precursor</i>
CTN_RS02700	-1,302	<i>Putative uncharacterized protein</i>
CTN_RS04755	-1,306	<i>TPR repeat-containing protein</i>
CTN_RS04105	-1,306	<i>GTP-binding protein lepA</i>
CTN_RS08480	-1,306	<i>Cation diffusion facilitator family transporter</i>
CTN_RS03105	-1,307	<i>Oligopeptide ABC transporter, permease protein</i>
CTN_RS05645	-1,308	<i>Radical SAM domain protein</i>
CTN_RS02635	-1,311	<i>Holliday junction branch migration protein RuvA</i>
CTN_RS07375	-1,315	<i>Arginyl-tRNA synthetase</i>
CTN_RS06180	-1,316	<i>Inosine-5-monophosphate dehydrogenase-related protein</i>
CTN_RS04110	-1,318	<i>Putative uncharacterized protein</i>
CTN_RS07055	-1,318	<i>Pyruvate ferredoxin/ferredoxin oxidoreductase, beta subunit</i>
CTN_RS02975	-1,319	<i>GTP-binding protein Obg/CgtA</i>
CTN_RS07495	-1,321	<i>Putative uncharacterized protein</i>
CTN_RS02750	-1,321	<i>hypothetical protein</i>
CTN_RS03275	-1,325	<i>Hypothetical Protein</i>
CTN_RS07060	-1,327	<i>Pyruvate flavodoxin/ferredoxin oxidoreductase domain protein</i>
CTN_RS02395	-1,327	<i>DNA repair protein RadA</i>
CTN_RS07930	-1,327	<i>Putative uncharacterized protein</i>
CTN_RS02065	-1,327	<i>UvrABC system protein C</i>
CTN_RS06480	-1,330	<i>Cell division protein FtsA</i>
CTN_RS08360	-1,332	<i>Putative uncharacterized protein</i>
CTN_RS07475	-1,335	<i>Glycoside hydrolase family 2, sugar binding</i>
CTN_RS04220	-1,336	<i>Radical SAM domain protein</i>
CTN_RS00195	-1,339	<i>Polysaccharide biosynthesis protein</i>
CTN_RS08250	-1,340	<i>Carbohydrate kinase, YjeF related protein</i>
CTN_RS02385	-1,340	<i>NADP-reducing hydrogenase, subunit C</i>
CTN_RS05780	-1,344	<i>peptide chain release factor 2</i>
CTN_RS05435	-1,348	<i>Putative uncharacterized protein</i>
CTN_RS08255	-1,350	<i>Lytic transglycosylase, catalytic</i>
CTN_RS00840	-1,350	<i>Condensin subunit ScpE</i>

CTN_RS09200	-1,352	<i>Mannose-6-phosphate isomerase</i>
CTN_RS08725	-1,352	<i>PfkB domain protein</i>
CTN_RS08080	-1,352	<i>Ribose ABC transporter, permease protein</i>
CTN_RS00690	-1,355	<i>tRNA delta(2)-isopentenylpyrophosphate transferase</i>
CTN_RS01210	-1,356	<i>Auxin Efflux Carrier</i>
CTN_RS04725	-1,360	<i>Bifunctional protein folC</i>
CTN_RS06990	-1,361	<i>Flagellar protein FljS</i>
CTN_RS03540	-1,361	<i>CRISPR-associated protein, Cas2 family</i>
CTN_RS05685	-1,362	<i>Formimidoyltetrahydrofolate cyclodeaminase</i>
CTN_RS04475	-1,362	<i>DNA mismatch repair protein mutS</i>
CTN_RS02360	-1,363	<i>Hypoxanthine phosphoribosyltransferase</i>
CTN_RS03300	-1,363	<i>Binding-protein-dependent transport systems inner membrane component precursor</i>
CTN_RS01905	-1,363	<i>Short-chain dehydrogenase/reductase SDR precursor</i>
CTN_RS07590	-1,364	<i>Endoglucanase</i>
CTN_RS02845	-1,368	<i>metal transport system ATP-binding protein</i>
CTN_RS09000	-1,369	<i>PSP1 domain protein</i>
CTN_RS06390	-1,370	<i>ABC-2 type transporter</i>
CTN_RS05570	-1,370	<i>Mg-protoporphyrin IX monomethyl ester oxidative cyclase-related protein</i>
CTN_RS08540	-1,374	<i>RNAse Z</i>
CTN_RS05995	-1,377	<i>Unknown</i>
CTN_RS03100	-1,378	<i>Oligopeptide/dipeptide ABC transporter, ATPase subunit</i>
CTN_RS00745	-1,380	<i>Putative uncharacterized protein</i>
CTN_RS09385	-1,382	<i>Chemotaxis protein cheY</i>
CTN_RS05660	-1,383	<i>Heptaprenyl diphosphate synthase component I precursor</i>
CTN_RS02255	-1,383	<i>NADH-quinone oxidoreductase, E subunit</i>
CTN_RS02870	-1,383	<i>Acetamidase</i>
CTN_RS02010	-1,385	<i>L-arabinose isomerase</i>
CTN_RS05665	-1,385	<i>Maf-like protein</i>
CTN_RS01945	-1,386	<i>6-phosphofructokinase, pyrophosphate-dependent</i>
CTN_RS09500	-1,386	<i>Flagellar protein</i>
CTN_RS09420	-1,386	<i>Putative uncharacterized protein</i>
CTN_RS08075	-1,387	<i>Ribose import ATP-binding protein rbsA 2</i>
CTN_RS09490	-1,388	<i>CheC, inhibitor of MCP methylation</i>

CTN_RS06605	-1,391	glutamine-dependent NAD(+) synthetase
CTN_RS06115	-1,392	Putative uncharacterized protein
CTN_RS02250	-1,397	NADP-reducing hydrogenase, subunit C
CTN_RS03360	-1,400	DNA mismatch repair protein mutL
CTN_RS07655	-1,401	Putative UDP-N-acetylglucosamine 2-epimerase
CTN_RS08630	-1,401	GTPase Era
CTN_RS01150	-1,401	6-phosphogluconate dehydrogenase, decarboxylating
CTN_RS08165	-1,401	Aspartate 1-decarboxylase precursor
CTN_RS04335	-1,403	YicCN-terminal domain protein
CTN_RS00845	-1,403	Putative uncharacterized protein
CTN_RS09450	-1,404	Glyceraldehyde-3-phosphate dehydrogenase
CTN_RS00940	-1,407	Outer membrane protein alpha precursor
CTN_RS04580	-1,410	Alanine racemase domain protein
CTN_RS03750	-1,411	Alpha-glucosidase
CTN_RS08315	-1,413	Flagellar biosynthesis protein FlhE
CTN_RS04425	-1,416	Hypothetical Protein
CTN_RS04115	-1,417	Glycerophosphoryl diester phosphodiesterase
CTN_RS03825	-1,417	Periplasmic binding protein/LacI transcriptional regulator precursor
CTN_RS00935	-1,425	Tyrosyl-tRNA synthetase
CTN_RS03465	-1,428	CRISPR-associated protein, Cas6 family
CTN_RS07760	-1,428	VWA domain-containing protein
CTN_RS08595	-1,437	Histidine kinase precursor
CTN_RS02600	-1,438	Adenosylhomocysteinase
CTN_RS06270	-1,440	Helix-turn-helix domain protein
CTN_RS05230	-1,445	glycoside hydrolase
CTN_RS02470	-1,448	Stage V sporulation protein ξ
CTN_RS05845	-1,449	Putative uncharacterized protein
CTN_RS00665	-1,449	Oligopeptide ABC transporter, ATP-binding protein
CTN_RS03690	-1,452	Valyl-tRNA synthetase
CTN_RS00670	-1,452	Heavy metal binding protein
CTN_RS05775	-1,453	Protein translocase subunit secA
CTN_RS02925	-1,457	UDP-N-acetylglucosamine 1-carboxyvinyltransferase
CTN_RS01630	-1,461	Radical SAM N-terminal domain protein

CTN_RS02985	-1,463	<i>TIM-barrel protein, nifB3 family</i>
CTN_RS08100	-1,464	<i>Putative uncharacterized protein</i>
CTN_RS02130	-1,466	<i>Glutamyl-tRNA(Gln) amidotransferase subunit C</i>
CTN_RS08815	-1,467	<i>Binding-protein-dependent transport systems inner membrane component</i>
CTN_RS04340	-1,471	<i>Aminotransferase, class V</i>
CTN_RS06395	-1,473	<i>ABC-2 type transporter</i>
CTN_RS02035	-1,473	<i>Putative uncharacterized protein</i>
CTN_RS08820	-1,473	<i>Extracellular solute-binding protein, family 1 precursor</i>
CTN_RS09335	-1,474	<i>Transcriptional regulator, MarR family</i>
CTN_RS02540	-1,477	<i>Putative uncharacterized protein</i>
CTN_RS03095	-1,480	<i>Oligopeptide ABC transporter, ATP-binding protein</i>
CTN_RS09355	-1,480	<i>Putative uncharacterized protein</i>
CTN_RS03415	-1,481	<i>NADP-reducing hydrogenase, subunit E</i>
CTN_RS05215	-1,481	<i>aspartate-tRNA ligase</i>
CTN_RS02315	-1,488	<i>Protein synthesis inhibitor</i>
CTN_RS05085	-1,488	<i>GTP-binding protein engE</i>
CTN_RS00685	-1,489	<i>Protein hfq</i>
CTN_RS04010	-1,490	<i>bifunctional aspartate carbamoyltransferase catalytic/regulatory subunit</i>
CTN_RS05670	-1,492	<i>DNA repair protein radC like protein</i>
CTN_RS02885	-1,497	<i>Sugar kinase, FGGY family</i>
CTN_RS03350	-1,500	<i>Laminarinase</i>
CTN_RS00775	-1,503	<i>UDP-glucose 4-epimerase</i>
CTN_RS02120	-1,506	<i>SsrA-binding protein</i>
CTN_RS08685	-1,510	<i>Cell division protein ftsZ</i>
CTN_RS07675	-1,513	<i>Transcriptional regulator, TetR family</i>
CTN_RS02175	-1,514	<i>Radical SAM domain protein</i>
CTN_RS01970	-1,517	<i>Sugar kinase, FGGY family</i>
CTN_RS09495	-1,520	<i>Flagellar motor switch protein FlM</i>
CTN_RS08990	-1,524	<i>Ribosomal protein L7Ae/L30e/S12e/Gadd45</i>
CTN_RS04730	-1,528	<i>Exodeoxyribonuclease 7 large subunit</i>
CTN_RS01755	-1,529	<i>Putative uncharacterized protein</i>
CTN_RS07830	-1,530	<i>ATPase</i>
CTN_RS01415	-1,532	<i>Diacylglycerol kinase catalytic region</i>

CTN_RS06995	-1,533	Acetyltransferase-related protein
CTN_RS09505	-1,537	Motility protein E
CTN_RS02535	-1,542	Putative uncharacterized protein
CTN_RS07545	-1,542	Potassium channel
CTN_RS00700	-1,543	Heat shock protein 70kD
CTN_RS08325	-1,544	Flagellar biosynthesis protein FlhF
CTN_RS03830	-1,546	Binding-protein-dependent transport systems inner membrane component precursor
CTN_RS05425	-1,546	Putative metal dependent phosphohydrolase precursor
CTN_RS01885	-1,546	Alpha-L-fucosidase
CTN_RS06715	-1,549	Glycosyl transferase, group 1
CTN_RS09135	-1,549	sporulation protein
CTN_RS04750	-1,549	Dak phosphatase
CTN_RS04350	-1,550	thiamine biosynthesis protein thil
CTN_RS05975	-1,552	ATP-dependent Clp protease, ATPase subunit
CTN_RS01400	-1,553	Outer membrane protein-like protein precursor
CTN_RS04065	-1,553	Putative uncharacterized protein
CTN_RS04035	-1,557	Putative uncharacterized protein
CTN_RS01860	-1,558	Putative uncharacterized protein
CTN_RS01775	-1,566	Ureidoglycolate hydrolase
CTN_RS03770	-1,570	Maltose ABC transporter, periplasmic maltose-binding protein
CTN_RS07915	-1,572	Putative uncharacterized protein
CTN_RS03055	-1,573	Flagellar hook-associated protein 3
CTN_RS05620	-1,574	Metal dependent phosphohydrolase
CTN_RS04430	-1,576	Hypothetical Protein
CTN_RS00180	-1,579	Putative repeat unit transporter
CTN_RS06880	-1,579	Extracellular solute-binding protein family 5 precursor
CTN_RS00390	-1,580	Cell division protein FtsH
CTN_RS02280	-1,581	Putative ABC transporter ATP-binding protein
CTN_RS04100	-1,581	Beta-mannosidase Man2
CTN_RS09215	-1,581	Sigma-B regulator
CTN_RS08740	-1,582	AstB/chuR-related protein
CTN_RS09395	-1,583	Flagellar biosynthesis protein FlhF
CTN_RS06155	-1,585	Sensor protein

CTN_RS02300	-1,585	<i>Flagellum-specific ATP synthase</i>
CTN_RS05375	-1,585	<i>Uncharacterized protein</i>
CTN_RS05655	-1,585	<i>Putative uncharacterized protein precursor</i>
CTN_RS04420	-1,586	<i>Putative uncharacterized protein</i>
CTN_RS04070	-1,589	<i>Putative uncharacterized protein</i>
CTN_RS01975	-1,590	<i>Sugar isomerase</i>
CTN_RS07000	-1,593	<i>HAD-superfamily hydrolase, subfamily IA, variant 1</i>
CTN_RS04745	-1,593	<i>Putative uncharacterized protein</i>
CTN_RS00440	-1,600	<i>Heat shock serine protease, periplasmic</i>
CTN_RS08090	-1,600	<i>transketolase, C-terminal subunit</i>
CTN_RS00850	-1,600	<i>Tryptophanyl-tRNA synthetase</i>
CTN_RS08160	-1,603	<i>Pseudouridine synthase</i>
CTN_RS03060	-1,604	<i>Flagellar assembly factor fliW</i>
CTN_RS04610	-1,605	<i>Inosine guanosine and xanthosine phosphorylase family</i>
CTN_RS08490	-1,607	<i>Peptidase M22, glycoprotease</i>
CTN_RS03120	-1,609	<i>Endo-1,4-beta-xylanase B precursor</i>
CTN_RS06030	-1,610	<i>NUDIX hydrolase</i>
CTN_RS02505	-1,611	<i>Response regulator</i>
CTN_RS03490	-1,611	<i>DnaJ-related protein</i>
CTN_RS02400	-1,613	<i>ATP-dependent Clp protease, ATPase subunit</i>
CTN_RS01550	-1,616	<i>endonuclease III domain-containing protein</i>
CTN_RS07485	-1,618	<i>Sugar-phosphate aldolase</i>
CTN_RS03090	-1,618	<i>Endo-1,3-beta-xylanase</i>
CTN_RS04040	-1,619	<i>DNA double-strand break repair rad50 ATPase</i>
CTN_RS09070	-1,623	<i>Lipopolysaccharide biosynthesis protein</i>
CTN_RS06710	-1,628	<i>Alpha-mannosidase-related protein</i>
CTN_RS08435	-1,629	<i>Putative uncharacterized protein</i>
CTN_RS02920	-1,629	<i>Pyruvate formate lyase activating enzyme</i>
CTN_RS08055	-1,631	<i>Ribokinase</i>
CTN_RS06295	-1,632	<i>AstB/chuR-related protein</i>
CTN_RS06305	-1,638	<i>Putative uncharacterized protein</i>
CTN_RS04165	-1,639	<i>ATP synthase subunit alpha</i>
CTN_RS04380	-1,640	<i>HAD-superfamily hydrolase, subfamily IA, variant 1</i>

CTN_RS05640	-1,644	<i>Hypothetical Protein</i>
CTN_RS08070	-1,645	<i>Putative uncharacterized protein</i>
CTN_RS08635	-1,652	<i>cytidine deaminase</i>
CTN_RS02210	-1,653	<i>UDP-N-acetylmuramoyl-tripeptide--D-alanyl-D-alanine ligase</i>
CTN_RS01670	-1,653	<i>Putative uncharacterized protein</i>
CTN_RS00080	-1,654	<i>Putative uncharacterized protein</i>
CTN_RS07815	-1,654	<i>Putative uncharacterized protein</i>
CTN_RS08290	-1,655	<i>Hypothetical Protein</i>
CTN_RS01890	-1,657	<i>Fructose-bisphosphate aldolase</i>
CTN_RS09195	-1,661	<i>Uncharacterized protein</i>
CTN_RS07465	-1,661	<i>Phosphodiesterase, MJ0936 family</i>
CTN_RS01965	-1,664	<i>AraM protein</i>
CTN_RS01155	-1,666	<i>TRAP dicarboxylate transporter, DctM subunit</i>
CTN_RS02290	-1,667	<i>Flagellar motor switch protein fliG</i>
CTN_RS08995	-1,667	<i>Putative uncharacterized protein</i>
CTN_RS05400	-1,674	<i>Lipopolysaccharide biosynthesis protein-related protein</i>
CTN_RS05970	-1,683	<i>Putative uncharacterized protein</i>
CTN_RS07660	-1,686	<i>Mannose-1-phosphate guanylyltransferase</i>
CTN_RS02860	-1,690	<i>L-lysine 2,3-aminomutase</i>
CTN_RS09240	-1,690	<i>Putative uncharacterized protein</i>
CTN_RS05500	-1,692	<i>Putative uncharacterized protein</i>
CTN_RS02930	-1,693	<i>putative diguanylate cyclase</i>
CTN_RS06185	-1,699	<i>Putative uncharacterized protein</i>
CTN_RS00230	-1,703	<i>Putative uncharacterized protein</i>
CTN_RS02270	-1,703	<i>Biotin--(Acetyl-CoA carboxylase) synthetase</i>
CTN_RS01395	-1,706	<i>Outer membrane protein-like protein precursor</i>
CTN_RS08330	-1,708	<i>Cobyrinic acid a,c-diamide synthase</i>
CTN_RS02960	-1,709	<i>Putative uncharacterized protein</i>
CTN_RS09340	-1,710	<i>Hypothetical Protein</i>
CTN_RS05935	-1,718	<i>Ribosome recycling factor</i>
CTN_RS09160	-1,718	<i>1,2-diacylglycerol 3-glucosyltransferase</i>
CTN_RS09400	-1,718	<i>Flagellar biosynthetic protein FlG</i>
CTN_RS05625	-1,719	<i>Lipopolysaccharide biosynthesis protein</i>

CTN_RS09640	-1,726	<i>Putative uncharacterized protein</i>
CTN_RS07385	-1,726	<i>Putative uncharacterized protein</i>
CTN_RS02630	-1,727	<i>Folylpolyglutamate synthase/dihydrofolate synthase</i>
CTN_RS08335	-1,728	<i>Type IV pilus assembly PilZ</i>
CTN_RS07835	-1,731	<i>Cupin 2, conserved barrel domain protein</i>
CTN_RS02465	-1,734	<i>CTN_trnaArg3</i>
CTN_RS02320	-1,735	<i>glycine dehydrogenase subunit 2</i>
CTN_RS06445	-1,736	<i>Methyltransferase type 11</i>
CTN_RS00620	-1,738	<i>Tryptophan synthase beta chain 2</i>
CTN_RS00060	-1,740	<i>NH(3)-dependent NAD(+) synthetase</i>
CTN_RS06980	-1,740	<i>NUDIX hydrolase</i>
CTN_RS07740	-1,742	<i>Alpha-glucosidase</i>
CTN_RS09235	-1,744	<i>(P)ppGpp synthetase</i>
CTN_RS07975	-1,747	<i>DsrH family protein</i>
CTN_RS00770	-1,748	<i>Iron-dependent transcriptional repressor</i>
CTN_RS03225	-1,748	<i>Iron-sulfur cluster-binding protein</i>
CTN_RS02285	-1,749	<i>Flagellar M-ring protein</i>
CTN_RS09510	-1,756	<i>Motility protein A</i>
CTN_RS09380	-1,760	<i>Chemotaxis protein cheW</i>
CTN_RS06375	-1,761	<i>ABC transporter, ATP-binding protein</i>
CTN_RS06035	-1,763	<i>Putative uncharacterized protein</i>
CTN_RS03845	-1,765	<i>Alpha amylase, catalytic region precursor</i>
CTN_RS02125	-1,765	<i>Hypothetical Protein</i>
CTN_RS05370	-1,774	<i>Lipopolysaccharide biosynthesis protein-related protein</i>
CTN_RS03485	-1,778	<i>Putative uncharacterized protein</i>
CTN_RS00135	-1,778	<i>hypothetical protein</i>
CTN_RS07770	-1,780	<i>Putative uncharacterized protein precursor</i>
CTN_RS01000	-1,781	<i>Hypothetical Protein</i>
CTN_RS05235	-1,781	<i>Dimethyladenosine transferase</i>
CTN_RS02355	-1,782	<i>Zn-dependent hydrolase of the beta-lactamase fold-like protein</i>
CTN_RS02345	-1,788	<i>6-phosphofructokinase</i>
CTN_RS07880	-1,794	<i>Putative uncharacterized protein</i>
CTN_RS03230	-1,796	<i>Putative uncharacterized protein</i>

CTN_RS05205	-1,797	cytidylate kinase
CTN_RS05080	-1,799	Metal dependent phosphohydrolase
CTN_RS06020	-1,799	Adenine phosphoribosyltransferase
CTN_RS02350	-1,800	Pyruvate kinase
CTN_RS02375	-1,801	ABC transporter, permease protein, cystW family
CTN_RS03560	-1,803	Succinyl-diaminopimelate desuccinylase
CTN_RS02205	-1,803	UDP-N-acetylmuramoyl-L-alanyl-D-glutamate--LD-lysine ligase
CTN_RS02075	-1,812	tRNA uridine 5-carboxymethylaminomethyl modification enzyme gidA
CTN_RS00600	-1,813	Fumarate hydratase, C-terminal subunit
CTN_RS02655	-1,816	Geranyltranstransferase
CTN_RS02980	-1,816	nicotinate (nicotinamide) nucleotide adenyllyltransferase
CTN_RS08060	-1,817	Ribose ABC transporter, membrane-associated protein
CTN_RS08065	-1,817	Ribose ABC transporter, periplasmic ribose-binding protein
CTN_RS05075	-1,820	hypothetical protein
CTN_RS03790	-1,824	Putative uncharacterized protein precursor
CTN_RS01760	-1,828	Putative sugar ABC transporter, permease component
CTN_RS06120	-1,835	Flagellar hook-basal body complex protein fliE
CTN_RS07335	-1,838	Ribonuclease 3
CTN_RS06850	-1,839	Maltose ABC transporter, permease protein
CTN_RS09245	-1,840	PmbA-related protein
CTN_RS07500	-1,846	Transcriptional regulator, DeoR family
CTN_RS02530	-1,847	Putative uncharacterized protein
CTN_RS01570	-1,854	NAD(P)H-dependent glycerol-3-phosphate dehydrogenase
CTN_RS09155	-1,855	Putative uncharacterized protein
CTN_RS04255	-1,856	Diguanylate cyclase and serine/threonine protein kinase with TPR repeats
CTN_RS01170	-1,856	ABC transporter related
CTN_RS08095	-1,860	Glycerol kinase 1
CTN_RS06385	-1,864	Putative uncharacterized protein
CTN_RS07160	-1,865	CBS domain containing protein
CTN_RS03760	-1,866	Maltose ABC transporter, permease protein
CTN_RS03250	-1,873	2-amino-4-hydroxy-6-hydroxymethyldihydropteridine pyrophosphokinase
CTN_RS05165	-1,873	RNA polymerase sigma factor rpoC
CTN_RS06955	-1,879	Regulatory protein, FmdB family

CTN_RS08110	-1,886	<i>Transcriptional regulator, LacI family</i>
CTN_RS01195	-1,887	<i>Binding-protein-dependent transport systems inner membrane component precursor</i>
CTN_RS05790	-1,891	<i>Type I phosphodiesterase/ nucleotide pyrophosphatase</i>
CTN_RS01165	-1,892	<i>C4-dicarboxylate-binding protein</i>
CTN_RS04445	-1,895	<i>Proline dipeptidase</i>
CTN_RS08195	-1,895	<i>Putative uncharacterized protein</i>
CTN_RS07430	-1,898	<i>Putative uncharacterized protein</i>
CTN_RS04605	-1,904	<i>Primary replicative DNA helicase</i>
CTN_RS07680	-1,906	<i>ABC transporter, permease protein</i>
CTN_RS04655	-1,906	<i>butyrate kinase 1</i>
CTN_RS05615	-1,907	<i>Single stranded DNA-specific exonuclease</i>
CTN_RS06300	-1,910	<i>AstB/chuR-related protein</i>
CTN_RS00720	-1,913	<i>tRNA (5-methylaminomethyl-2-thiouridylate)-methyltransferase</i>
CTN_RS09005	-1,916	<i>DNA polymerase III, gamma subunit-related protein</i>
CTN_RS06865	-1,923	<i>Extracellular solute-binding protein family 1</i>
CTN_RS08210	-1,924	<i>ATPase associated with various cellular activities, AAA_5</i>
CTN_RS06475	-1,925	<i>MutS2 protein</i>
CTN_RS08050	-1,926	<i>LemA family protein precursor</i>
CTN_RS04060	-1,928	<i>Putative uncharacterized protein</i>
CTN_RS04345	-1,928	<i>1-acyl-sn-glycerol-3-phosphate acetyltransferase</i>
CTN_RS08155	-1,930	<i>Putative uncharacterized protein</i>
CTN_RS00150	-1,931	<i>Glycosyl transferase, family 2</i>
CTN_RS07935	-1,937	<i>Putative uncharacterized protein</i>
CTN_RS01795	-1,938	<i>Putative uncharacterized protein</i>
CTN_RS05815	-1,951	<i>hypothetical protein</i>
CTN_RS05750	-1,962	<i>Pyrolo-quinoline quinone precursor</i>
CTN_RS06025	-1,964	<i>4-diphosphocytidyl-2-C-methyl-D-erythritol kinase</i>
CTN_RS03005	-1,966	<i>Putative uncharacterized protein precursor</i>
CTN_RS02995	-1,967	<i>General secretion pathway protein F</i>
CTN_RS09085	-1,973	<i>Flagellin</i>
CTN_RS03355	-1,975	<i>Methyl-accepting chemotaxis protein</i>
CTN_RS02510	-1,977	<i>Activator of Hsp90 ATPase 1 family protein</i>
CTN_RS05810	-1,984	<i>Glycerate kinase</i>

CTN_RS06320	-1,986	<i>Fe-Soxidoreductase-like protein</i>
CTN_RS04045	-1,993	<i>Exonuclease</i>
CTN_RS04140	-1,995	<i>F-ATPase I-subunit</i>
CTN_RS03940	-2,002	<i>Endonuclease V</i>
CTN_RS03775	-2,004	<i>Alpha-amylase</i>
CTN_RS03765	-2,004	<i>Binding-protein-dependent transport systems inner membrane component precursor</i>
CTN_RS01300	-2,009	<i>2-oxoglutarate ferredoxin oxidoreductase, beta subunit</i>
CTN_RS00730	-2,009	<i>Putative uncharacterized protein</i>
CTN_RS03945	-2,012	<i>Membrane bound protein LytF</i>
CTN_RS09175	-2,023	<i>Phosphopantetheine adenyllyltransferase</i>
CTN_RS02990	-2,029	<i>Rubryerythrin</i>
CTN_RS02915	-2,030	<i>ROK family protein</i>
CTN_RS03635	-2,030	<i>Elongation factor G-like protein</i>
CTN_RS04875	-2,035	<i>PhoH-related protein</i>
CTN_RS04695	-2,043	<i>UvrABC system protein E</i>
CTN_RS09205	-2,043	<i>Putative uncharacterized protein</i>
CTN_RS07820	-2,047	<i>Putative uncharacterized protein</i>
CTN_RS01815	-2,056	<i>Monosaccharide-transporting ATPase</i>
CTN_RS08425	-2,057	<i>methylated-DNA--[protein]-cysteine S-methyltransferase</i>
CTN_RS01185	-2,064	<i>Beta-lactamase domain protein</i>
CTN_RS00175	-2,067	<i>Putative dTDP-4-dehydrorhamnose reductase</i>
CTN_RS05840	-2,069	<i>Unknown</i>
CTN_RS02890	-2,070	<i>Ribose import ATP-binding protein rbsA 1</i>
CTN_RS07970	-2,074	<i>Uncharacterized protein involved in the oxidation of intracellular sulfur-like protein</i>
CTN_RS05365	-2,075	<i>hypothetical protein</i>
CTN_RS04325	-2,077	<i>Guanylate kinase</i>
CTN_RS02180	-2,088	<i>Putative uncharacterized protein</i>
CTN_RS01190	-2,091	<i>ABC-type, ATP binding, spermidine/spermine transporter, PotA</i>
CTN_RS08735	-2,096	<i>AstB/chuR-related protein</i>
CTN_RS06950	-2,100	<i>Hypothetical Protein</i>
CTN_RS02185	-2,105	<i>Putative uncharacterized protein</i>
CTN_RS06845	-2,106	<i>Maltose ABC transporter, permease protein</i>
CTN_RS00155	-2,106	<i>Glucose-1-phosphate thymidyltransferase</i>

CTN_RS08430	-2,107	<i>Penicillin-binding protein, class 1A</i>
CTN_RS09555	-2,108	<i>Hydrolase, TatD family</i>
CTN_RS06380	-2,113	<i>ABC-2 type transporter</i>
CTN_RS07690	-2,115	<i>Sugarcation symporter family protein</i>
CTN_RS03785	-2,117	<i>Putative uncharacterized protein</i>
CTN_RS02705	-2,124	<i>Putative uncharacterized protein</i>
CTN_RS05480	-2,124	<i>Radical SAM domain protein</i>
CTN_RS03810	-2,125	<i>ROK family protein</i>
CTN_RS03295	-2,127	<i>Extracellular solute-binding protein, family 1 precursor</i>
CTN_RS06470	-2,136	<i>Putative uncharacterized protein</i>
CTN_RS04310	-2,140	<i>ErfK/YbiS/YcfS/YnhG family protein</i>
CTN_RS06190	-2,145	<i>PHP C-terminal domain protein</i>
CTN_RS02295	-2,145	<i>Flagellar export/assembly protein</i>
CTN_RS03340	-2,149	<i>Putative uncharacterized protein</i>
CTN_RS01440	-2,153	<i>endonuclease 4</i>
CTN_RS09250	-2,155	<i>TldD protein</i>
CTN_RS05240	-2,158	<i>antiterminator</i>
CTN_RS06165	-2,160	<i>Putative uncharacterized protein</i>
CTN_RS01320	-2,172	<i>Thymidine kinase</i>
CTN_RS07600	-2,180	<i>Alpha/beta hydrolase fold protein</i>
CTN_RS00955	-2,183	<i>Pyrazinamidase/nicotinamidase-related protein</i>
CTN_RS03755	-2,188	<i>Cyclomaltodextrinase glucanotransferase</i>
CTN_RS00225	-2,189	<i>ATPase-like protein</i>
CTN_RS03815	-2,189	<i>ABC transporter related</i>
CTN_RS07810	-2,193	<i>Glutamate dehydrogenase</i>
CTN_RS05490	-2,209	<i>Putative uncharacterized protein</i>
CTN_RS00310	-2,213	<i>Sugar ABC transporter, periplasmic sugar-binding protein</i>
CTN_RS02240	-2,215	<i>Phosphodiesterase, MJ0936 family</i>
CTN_RS06340	-2,215	<i>ABC transporter related precursor</i>
CTN_RS07040	-2,218	<i>Alpha-glucan phosphorylase</i>
CTN_RS02905	-2,220	<i>Sugar ABC transporter, permease protein</i>
CTN_RS06975	-2,225	<i>Condensin subunit Smc</i>
CTN_RS06040	-2,226	<i>Putative uncharacterized protein</i>

CTN_RS06260	-2,235	hypothetical protein
CTN_RS00395	-2,237	tRNA(Ile)-lysidine synthase
CTN_RS07685	-2,240	ABC transporter
CTN_RS04675	-2,241	2-oxoisovalerate oxidoreductase, beta subunit
CTN_RS03000	-2,249	Putative uncharacterized protein
CTN_RS07215	-2,256	MTA/SAH nucleosidase
CTN_RS08200	-2,263	Restriction endonuclease
CTN_RS02080	-2,271	DNA polymerase III, beta subunit
CTN_RS02575	-2,289	Putative uncharacterized protein
CTN_RS03315	-2,290	Oligopeptide ABC transporter, periplasmic oligopeptide-binding protein
CTN_RS00050	-2,292	2-C-methyl-D-erythritol 2,4-cyclo
CTN_RS00190	-2,296	Glycosyl transferase group 1
CTN_RS06045	-2,299	Seryl-tRNA synthetase
CTN_RS09140	-2,300	tRNA methyltransferase complex GCD14 subunit precursor
CTN_RS08040	-2,312	Oligoendopeptidase, M3 family
CTN_RS00045	-2,316	Putative uncharacterized protein
CTN_RS09550	-2,319	Pleiotropic regulatory protein
CTN_RS04440	-2,324	Putative uncharacterized protein
CTN_RS01805	-2,327	oxidoreductase, short chain dehydrogenase/reductase family
CTN_RS05360	-2,340	Putative uncharacterized protein
CTN_RS00140	-2,345	Glycosyl transferase, group 1
CTN_RS05965	-2,348	2-C-methyl-D-erythritol 4-phosphate cytidyltransferase
CTN_RS06080	-2,350	Putative uncharacterized protein
CTN_RS01895	-2,351	Carbohydrate kinase, FGGY
CTN_RS03495	-2,392	Putative uncharacterized protein
CTN_RS01435	-2,395	Putative uncharacterized protein
CTN_RS04740	-2,396	1-deoxy-D-xylulose-5-phosphate synthase
CTN_RS08475	-2,400	phosphopyruvate hydratase
CTN_RS02325	-2,400	glycine dehydrogenase subunit 1
CTN_RS01780	-2,408	Monosaccharide-transporting ATPase precursor
CTN_RS07940	-2,423	hypothetical protein
CTN_RS06170	-2,434	Positive regulator of sigma E, PseO/MucC
CTN_RS00945	-2,439	Putative uncharacterized protein

CTN_RS06175	-2,444	<i>DRTGG domain protein</i>
CTN_RS07550	-2,446	<i>Divalent-cation tolerance protein cutA</i>
CTN_RS05800	-2,448	<i>Putative uncharacterized protein</i>
CTN_RS07695	-2,449	<i>Extracellular solute-binding protein, family 1 precursor</i>
CTN_RS09230	-2,470	<i>D-tyrosyl-tRNA(Tyr) deacylase</i>
CTN_RS06725	-2,473	<i>Transcriptional regulator, RpiR family</i>
CTN_RS02680	-2,483	<i>Flavin reductase domain protein, FMN-binding</i>
CTN_RS03565	-2,487	<i>Histidine kinase</i>
CTN_RS04355	-2,487	<i>Tetratricopeptide TPR_2 repeat protein</i>
CTN_RS09485	-2,495	<i>Dehydrase-related protein</i>
CTN_RS09375	-2,495	<i>Chemotaxis protein cheA</i>
CTN_RS05220	-2,506	<i>Translation initiation factor, eIF-2B alpha subunit-related</i>
CTN_RS01770	-2,508	<i>Extracellular solute-binding protein family 1 precursor</i>
CTN_RS06465	-2,509	<i>ATPase, BadF/BadG/BcrA/BcrD type</i>
CTN_RS02955	-2,518	<i>Basic membrane protein</i>
CTN_RS05765	-2,520	<i>Hemolysin A precursor</i>
CTN_RS05210	-2,524	<i>Putative anti-sigma factor antagonist</i>
CTN_RS04480	-2,527	<i>GCN5-related N-acetyltransferase</i>
CTN_RS02340	-2,530	<i>Putative uncharacterized protein</i>
CTN_RS04435	-2,532	<i>Putative uncharacterized protein</i>
CTN_RS08340	-2,537	<i>CheY-P phosphatase cheC</i>
CTN_RS00215	-2,538	<i>HEPN domain-containing protein</i>
CTN_RS00605	-2,545	<i>Fumarate hydratase, N-terminal subunit</i>
CTN_RS00760	-2,545	<i>Flagellar export protein Fli</i>
CTN_RS03400	-2,562	<i>Methyl-accepting chemotaxis sensory transducer</i>
CTN_RS08205	-2,567	<i>Putative uncharacterized protein</i>
CTN_RS08655	-2,568	<i>Response regulator</i>
CTN_RS02190	-2,571	<i>Glucose-1-phosphate adenylyltransferase</i>
CTN_RS00235	-2,571	<i>Chromosome segregation ATPase-like protein precursor</i>
CTN_RS00185	-2,576	<i>Hypothetical Protein</i>
CTN_RS07865	-2,582	<i>Transposase</i>
CTN_RS00415	-2,584	<i>DNA polymerase III polC type</i>
CTN_RS06970	-2,585	<i>Oxidoreductase, aldo/keto reductase family</i>

CTN_RS01995	-2,586	<i>Binding-protein-dependent transport systems inner membrane component</i>
CTN_RS04250	-2,591	<i>Phosphoesterase, FecJ domain protein</i>
CTN_RS00735	-2,592	<i>Putative uncharacterized protein</i>
CTN_RS03840	-2,596	<i>Extracellular solute-binding protein, family 1 precursor</i>
CTN_RS03500	-2,600	<i>CRISPR-associated protein, Cas6 family</i>
CTN_RS04390	-2,602	<i>Putative uncharacterized protein</i>
CTN_RS02550	-2,616	<i>23S ribosomal RNA</i>
CTN_RS02195	-2,618	<i>Glucose-1-phosphate adenylyltransferase, GlgD subunit</i>
CTN_RS09145	-2,618	<i>Carboxyl-terminal protease precursor</i>
CTN_RS01960	-2,620	<i>Transcriptional regulator, PadR family</i>
CTN_RS04665	-2,623	<i>butyrate kinase 2</i>
CTN_RS08650	-2,631	<i>Formiminotransferase-cyclodeaminase/formiminotetrahydrofolate cyclodeaminase</i>
CTN_RS06400	-2,632	<i>ABC transporter related</i>
CTN_RS03535	-2,632	<i>CRISPR-associated protein, Cas1 family</i>
CTN_RS09345	-2,632	<i>Biotin/lipoate A/B protein ligase</i>
CTN_RS04225	-2,633	<i>Putative uncharacterized protein</i>
CTN_RS02820	-2,644	<i>Carboxypeptidase G2</i>
CTN_RS05590	-2,644	<i>Flagellar protein FgA</i>
CTN_RS04315	-2,649	<i>DNA/pantothenate metabolism flavoprotein</i>
CTN_RS01305	-2,649	<i>Deoxycytidylate deaminase</i>
CTN_RS02660	-2,654	<i>Putative uncharacterized protein</i>
CTN_RS08085	-2,661	<i>transketolase, N-terminal subunit</i>
CTN_RS07755	-2,671	<i>hypothetical protein</i>
CTN_RS00170	-2,672	<i>Putative uncharacterized protein</i>
CTN_RS07965	-2,673	<i>DsrE family protein</i>
CTN_RS04050	-2,675	<i>Putative uncharacterized protein</i>
CTN_RS05770	-2,679	<i>Putative uncharacterized protein precursor</i>
CTN_RS09350	-2,687	<i>Methyltransferase gidE</i>
CTN_RS02000	-2,695	<i>Binding-protein-dependent transport systems inner membrane component</i>
CTN_RS02970	-2,703	<i>Putative uncharacterized protein</i>
CTN_RS07030	-2,705	<i>Metal dependent phosphohydrolase</i>
CTN_RS08620	-2,723	<i>Chaperone protein dnaK</i>
CTN_RS07035	-2,730	<i>Short-chain dehydrogenase/reductase SDF</i>

CTN_RS01490	-2,730	<i>Acriflavin resistance protein</i>
CTN_RS06515	-2,732	<i>Endo-1,4-beta-xylanase precursor</i>
CTN_RS09150	-2,753	<i>Putative uncharacterized protein</i>
CTN_RS04235	-2,756	<i>RNA polymerase sigma-E factor</i>
CTN_RS06705	-2,765	<i>ABC transporter related</i>
CTN_RS03855	-2,766	<i>Cellobiose-phosphorylase</i>
CTN_RS06405	-2,772	<i>Radical SAM domain protein</i>
CTN_RS06160	-2,774	<i>Putative uncharacterized protein</i>
CTN_RS02790	-2,775	<i>Radical SAM domain protein</i>
CTN_RS06130	-2,780	<i>Flagellar basal-body rod protein FlgE</i>
CTN_RS02330	-2,786	<i>Glycine cleavage system H protein</i>
CTN_RS09095	-2,791	<i>end_range=1786187,.</i>
CTN_RS00295	-2,793	<i>PHP C-terminal domain protein precursor</i>
CTN_RS04680	-2,796	<i>Thiamine pyrophosphate enzyme domain protein TPP-binding</i>
CTN_RS04705	-2,797	<i>Elongation factor F</i>
CTN_RS02005	-2,806	<i>Extracellular solute-binding protein family 1 precursor</i>
CTN_RS05675	-2,817	<i>Metal dependent phosphohydrolase</i>
CTN_RS02625	-2,823	<i>Phosphopentomutase</i>
CTN_RS00300	-2,828	<i>Monosaccharide-transporting ATPase precursor</i>
CTN_RS09075	-2,834	<i>Putative uncharacterized protein</i>
CTN_RS01175	-2,872	<i>Inner-membrane translocator</i>
CTN_RS07785	-2,876	<i>Major facilitator superfamily MFS_1</i>
CTN_RS01810	-2,882	<i>Putative ribose/galactose/methyl galactoside import ATP-binding protein</i>
CTN_RS02545	-2,888	<i>5S ribosomal RNA</i>
CTN_RS07735	-2,893	<i>Putative uncharacterized protein</i>
CTN_RS07955	-2,894	<i>Hypothetical Protein</i>
CTN_RS07780	-2,898	<i>Esterase</i>
CTN_RS08000	-2,913	<i>Methyl-accepting chemoreceptor-related protein</i>
CTN_RS01990	-2,915	<i>Putative uncharacterized protein</i>
CTN_RS06410	-2,938	<i>hypothetical protein</i>
CTN_RS01295	-2,947	<i>2-oxoglutarate ferredoxin oxidoreductase, gamma subunit</i>
CTN_RS03405	-2,949	<i>Beta-lactamase domain protein</i>
CTN_RS09255	-2,949	<i>Putative uncharacterized protein</i>

CTN_RS04245	-2,977	purine-nucleoside phosphorylase
CTN_RS02410	-2,980	protein of unknown function DUF355
CTN_RS02335	-2,982	Aminomethyltransferase
CTN_RS01410	-3,002	Putative uncharacterized protein
CTN_RS01200	-3,002	Binding-protein-dependent transport systems inner membrane component precursor
CTN_RS04720	-3,013	Formate-tetrahydrofolate ligase
CTN_RS04145	-3,021	ATP synthase A chain
CTN_RS02910	-3,033	Alcohol dehydrogenase, iron-containing
CTN_RS01985	-3,045	Alpha-L-arabinofuranosidase
CTN_RS07950	-3,045	Hypothetical Protein
CTN_RS03780	-3,048	hypothetical protein
CTN_RS00040	-3,053	Putative uncharacterized protein
CTN_RS04660	-3,065	Phosphate butyryltransferase
CTN_RS01205	-3,075	Extracellular solute-binding protein family 1 precursor
CTN_RS02900	-3,075	XylU-related protein
CTN_RS04330	-3,080	Hypothetical Protein
CTN_RS06125	-3,091	Flagellar basal-body rod protein FlgC
CTN_RS07960	-3,095	Putative uncharacterized protein
CTN_RS02895	-3,101	Sugar ABC transporter, periplasmic sugar-binding protein
CTN_RS01865	-3,107	Beta-D-galactosidase
CTN_RS01900	-3,116	Alcohol dehydrogenase GroES domain protein
CTN_RS04155	-3,123	ATP synthase B chain
CTN_RS07730	-3,136	Aldehyde dehydrogenase
CTN_RS09080	-3,203	Putative uncharacterized protein
CTN_RS02580	-3,235	Putative uncharacterized protein
CTN_RS07855	-3,252	Transcriptional regulator, AraC family
CTN_RS07945	-3,256	Putative uncharacterized protein
CTN_RS00490	-3,268	Putative uncharacterized protein
CTN_RS04055	-3,269	ATP-dependent protease LA
CTN_RS01695	-3,272	oxidoreductase, short chain dehydrogenase/reductase family
CTN_RS02685	-3,316	Alkaline phosphatase precursor
CTN_RS00240	-3,339	Metal dependent phosphohydrolase
CTN_RS07985	-3,351	Putative uncharacterized protein

CTN_RS00790	-3,358	co-chaperone GroE
CTN_RS02585	-3,367	Acyl carrier protein
CTN_RS05805	-3,371	ComFC protein
CTN_RS04160	-3,383	F-ATPase delta-subunit
CTN_RS00210	-3,408	nucleotidyltransferase domain-containing protein
CTN_RS04670	-3,422	2-oxoisovalerate oxidoreductase, gamma subunit
CTN_RS00165	-3,437	dTDP-glucose 4,6-dehydratase
CTN_RS04230	-3,443	Putative uncharacterized protein
CTN_RS04735	-3,448	Exodeoxyribonuclease 7 small subunit
CTN_RS03530	-3,519	CRISPR-associated exonuclease, Cas4 family
CTN_RS08660	-3,528	S-layer-like array protein
CTN_RS07805	-3,529	Putative uncharacterized protein
CTN_RS08120	-3,545	Putative uncharacterized protein
CTN_RS00055	-3,557	Putative uncharacterized protein
CTN_RS04710	-3,566	Putative uncharacterized protein
CTN_RS09090	-3,575	Glycosyl transferase family 2
CTN_RS05760	-3,604	FOG WD40-like repeat-like protein
CTN_RS03110	-3,649	Binding-protein-dependent transport system inner membrane component
CTN_RS06485	-3,650	Sugar ABC transporter, ATP-binding protein
CTN_RS00305	-3,672	Sugar ABC transporter, permease protein
CTN_RS05585	-3,677	Flagellar L-ring protein precursor
CTN_RS09365	-3,699	Protein-L-isopartate O-methyltransferase
CTN_RS04715	-3,702	N utilization substance protein B like protein
CTN_RS03665	-3,749	Nicotinate-nucleotide pyrophosphorylase
CTN_RS07700	-3,783	Binding-protein-dependent transport systems inner membrane component
CTN_RS00290	-3,826	Uncharacterized FAD-dependent dehydrogenase-like protein
CTN_RS00420	-3,870	Crossover junction endodeoxyribonuclease ruvC
CTN_RS02965	-3,871	DNA ligase
CTN_RS05580	-3,891	Flagellar P-ring protein precursor
CTN_RS08905	-3,896	ABC transporter, ATP-binding protein
CTN_RS07825	-3,928	Putative uncharacterized protein
CTN_RS07065	-3,932	Diguanylate cyclase
CTN_RS03520	-3,948	CRISPR-associated helicase, Cas3 family

CTN_RS05520	-3,978	<i>Transcriptional regulator, BadM/Rrf2 family</i>
CTN_RS08010	-3,997	<i>Putative uncharacterized protein</i>
CTN_RS07990	-4,019	<i>Putative uncharacterized protein</i>
CTN_RS09370	-4,061	<i>QnA-like protein</i>
CTN_RS01690	-4,121	<i>transcriptional regulator, PpiR family</i>
CTN_RS05795	-4,127	<i>Putative uncharacterized protein</i>
CTN_RS06685	-4,140	<i>Radical SAM domain protein</i>
CTN_RS04685	-4,144	<i>Pyruvate ferredoxin/flavodoxin oxidoreductase</i>
CTN_RS04150	-4,146	<i>ATP synthase C chain</i>
CTN_RS08640	-4,161	<i>Hemolysin-related protein</i>
CTN_RS02565	-4,187	<i>primosomal protein N</i>
CTN_RS07070	-4,189	<i>beta-lactamase domain protein</i>
CTN_RS08020	-4,203	<i>Integrase-recombinase protein</i>
CTN_RS09520	-4,208	<i>Putative uncharacterized protein</i>
CTN_RS04320	-4,218	<i>DNA-directed RNA polymerase subunit omega</i>
CTN_RS03040	-4,234	<i>Anti-sigma-28 factor, FlgM</i>
CTN_RS01180	-4,235	<i>Sugar binding protein of ABC transporter</i>
CTN_RS07045	-4,238	<i>Putative uncharacterized protein</i>
CTN_RS03195	-4,259	<i>Alpha-glucuronidase</i>
CTN_RS07875	-4,283	<i>Putative uncharacterized protein</i>
CTN_RS09535	-4,323	<i>M-related protein</i>
CTN_RS03050	-4,331	<i>Flagellar hook-associated protein 1</i>
CTN_RS03870	-4,361	<i>Alpha-mannosidase</i>
CTN_RS06840	-4,423	<i>Extracellular solute-binding protein family 1 precursor</i>
CTN_RS03170	-4,446	<i>Binding-protein-dependent transport systems inner membrane component</i>
CTN_RS01685	-4,500	<i>Phosphoglycerate dehydrogenase</i>
CTN_RS03175	-4,508	<i>Binding-protein-dependent transport systems inner membrane component</i>
CTN_RS08910	-4,556	<i>Putative uncharacterized protein</i>
CTN_RS01405	-4,556	<i>threonine ammonia-lyase</i>
CTN_RS02390	-4,565	<i>DNA integrity scanning protein disA</i>
CTN_RS04005	-4,577	<i>UDP-sugar hydrolase</i>
CTN_RS01700	-4,589	<i>TRAP dicarboxylate transporter, DctM subunit precursor</i>
CTN_RS03675	-4,604	<i>L-aspartate dehydrogenase</i>

CTN_RS01800	-4,656	putative periplasmic binding protein
CTN_RS01230	-4,717	Sugar ABCtransporter, permease protein
CTN_RS05445	-4,757	Flagellar biosynthesis-related protein
CTN_RS01235	-4,814	Sugar ABCtransporter, permease protein
CTN_RS05575	-4,855	Putative uncharacterized protein
CTN_RS02795	-4,883	Beta-lactamase domain protein
CTN_RS05755	-4,907	tRNA pseudouridine synthase A
CTN_RS00785	-4,907	chaperonin GroL
CTN_RS03670	-4,931	Quinolate synthetase A
CTN_RS07905	-4,956	Putative uncharacterized protein
CTN_RS02500	-4,957	ATPase
CTN_RS07870	-5,008	Transposase
CTN_RS07725	-5,040	Putative uncharacterized protein
CTN_RS03525	-5,132	CRISPR-associated helicase, Cas3 family
CTN_RS03200	-5,138	Putative uncharacterized protein
CTN_RS06490	-5,149	Prevent-host-death family protein
CTN_RS07705	-5,161	Binding-protein-dependent transport systems inner membrane component precursor
CTN_RS08975	-5,213	Putative uncharacterized protein
CTN_RS08615	-5,231	Protein grpE
CTN_RS03875	-5,329	Glycosidase
CTN_RS08665	-5,361	hypothetical protein
CTN_RS03185	-5,394	Oligopeptide ABCtransporter, ATP-binding protein
CTN_RS03880	-5,459	Sugar ABCtransporter, permease protein
CTN_RS05870	-5,461	Putative uncharacterized protein
CTN_RS05495	-5,658	Hypothetical Protein
CTN_RS07710	-5,741	Fructose-6-phosphate aldolase
CTN_RS08610	-5,752	Heat-inducible transcription repressor hrcA
CTN_RS03510	-5,862	CRISPR-associated autoregulator, Cst2 family
CTN_RS01240	-5,898	Sugar ABCtransporter, periplasmic sugar-binding protein
CTN_RS07720	-5,924	Putative uncharacterized protein
CTN_RS03505	-5,972	Putative uncharacterized protein
CTN_RS09650	-5,985	Unknown
CTN_RS03895	-6,025	Transcriptional regulator, LacI family

CTN_RS00160	-6,131	<i>Putative dTDP-6-deoxy-D-glucose-3,5-epimerase</i>
CTN_RS02800	-6,149	<i>FAD-dependent pyridine nucleotide-disulphide oxidoreductase</i>
CTN_RS03180	-6,160	<i>Oligopeptide ABC transporter, ATP-binding protein</i>
CTN_RS01270	-6,328	<i>ROK family protein</i>
CTN_RS00220	-6,338	<i>Uncharacterized protein</i>
CTN_RS05510	-6,361	<i>Endo-1,4-beta-glucanase E</i>
CTN_RS02805	-6,505	<i>Isochorismatase-related protein</i>
CTN_RS07715	-6,548	<i>Putative uncharacterized protein</i>
CTN_RS03190	-6,606	<i>Oligopeptide ABC transporter, periplasmic oligopeptide-binding protein</i>
CTN_RS03045	-6,648	<i>Putative uncharacterized protein</i>
CTN_RS05440	-6,659	<i>Putative uncharacterized protein</i>
CTN_RS06770	-7,069	<i>Transcriptional regulator, LacI family</i>
CTN_RS00615	-7,080	<i>Transposase, IS605 OrfB family</i>
CTN_RS09530	-7,087	<i>Putative uncharacterized protein</i>
CTN_RS01545	-7,107	<i>nitroreductase family protein</i>
CTN_RS03515	-7,221	<i>CRISPR-associated protein Cas5 family</i>
CTN_RS03890	-7,238	<i>Sugar ABC transporter, periplasmic sugar-binding protein</i>
CTN_RS03860	-7,246	<i>Putative uncharacterized protein</i>
CTN_RS03555	-7,306	<i>Xylose isomerase</i>
CTN_RS01710	-7,347	<i>ABC transporter, periplasmic substrate-binding protein</i>
CTN_RS03160	-7,399	<i>Endo-1,4-beta-xylanase A precursor</i>
CTN_RS09515	-7,460	<i>Flagellar protein</i>
CTN_RS08915	-7,606	<i>NADPH-dependent 7-cyano-7-deazaguanine reductase</i>
CTN_RS01220	-7,828	<i>Xylose isomerase domain protein TIM barrel</i>
CTN_RS08130	-8,074	<i>Putative uncharacterized protein</i>
CTN_RS01500	-8,385	<i>Heat shock protein Hsp26</i>
CTN_RS03115	-8,430	<i>Periplasmic binding protein</i>
CTN_RS09525	-8,513	<i>Basal-body rod modification protein FlgL</i>
CTN_RS01705	-8,819	<i>Tripartite ATP-independent periplasmic transporter, DctQ component</i>
CTN_RS06755	-8,977	<i>Binding-protein-dependent transport systems inner membrane component</i>
CTN_RS01225	-9,049	<i>Sugar ABC transporter, ATP-binding protein</i>
CTN_RS03165	-9,106	<i>Transposase, IS605 OrfB family</i>
CTN_RS05505	-9,130	<i>Endo-1,4-beta-glucanase A</i>

CTN_RS06765	-9,222	Oligopeptide ABC transporter, ATP-binding protein
CTN_RS03885	-9,229	Sugar ABC transporter, permease protein
CTN_RS06760	-10,030	Oligopeptide/dipeptide ABC transporter, ATPase subunit
CTN_RS05850	-10,396	hypothetical protein
CTN_RS02810	-10,569	Flagellin
CTN_RS01475	-11,314	Transcriptional regulators-like protein
CTN_RS08495	-11,780	ATPase AAA-2 domain protein
CTN_RS01870	-13,438	peptide ABC transporter substrate-binding protein
CTN_RS01480	-15,628	Hypothetical Protein
CTN_RS01265	-16,089	Alcohol dehydrogenase, zinc-containing
CTN_RS06750	-16,147	Binding-protein-dependent transport systems inner membrane component
CTN_RS01495	-16,919	Chaperone protein dnaK
CTN_RS01245	-17,329	Xylose isomerase domain protein TIM barrel
CTN_RS01260	-20,209	Creatinine amidohydrolase
CTN_RS01250	-22,618	PfkB domain protein
CTN_RS01255	-22,765	Oxidoreductase domain protein
CTN_RS06730	-53,855	Beta-mannosidase
CTN_RS06735	-82,574	Glycosidase
CTN_RS06740	-91,573	ROK family protein
CTN_RS06745	-107,213	Oligopeptide ABC transporter, periplasmic oligopeptide-binding protein