

Supplementary File 5. List of the non-detected proteins. COG, pFAM and TIGRFAM assignments are shown, and presence of predicted signal peptides and transmembrane helices are indicated.

Locus Tag	Product Name	AA Len.	COG	pFAM	TIGRFam	Signal Peptide	Transmembrane Helix
MFLA_1771	amino acid/amide ABC transporter ATP-binding protein 2, HAAT family (TC 3.A.1.4.-) (IMGterm)	229	Amino acid transport and metabolism	pfam00005	TIGR03410		
MFLA_0154	amino acid/amide ABC transporter ATP-binding protein 2, HAAT family (TC 3.A.1.4.-) (IMGterm)	241	Amino acid transport and metabolism	pfam00005			
MFLA_0153	amino acid/amide ABC transporter ATP-binding protein 1, HAAT family (TC 3.A.1.4.-) (IMGterm)	238	Amino acid transport and metabolism	pfam00005 pfam12399			
MFLA_2562	L-glutamine synthetase (EC 6.3.1.2) (IMGterm)	452	Amino acid transport and metabolism	pfam00120	TIGR00653 TIGR03105		
MFLA_1856	L-glutamine synthetase (EC 6.3.1.2) (IMGterm)	453	Amino acid transport and metabolism	pfam00120	TIGR03105		
MFLA_0101	aminotransferase, class I and II	331	Amino acid transport and metabolism	pfam00155	TIGR01140		
MFLA_0617	cysteine desulfurase (EC 2.8.1.7) (IMGterm)	621	Amino acid transport and metabolism	pfam00266	TIGR01979		
MFLA_0695	Na ⁺ /solute symporter	492	Amino acid transport and metabolism	pfam00474		*	*
MFLA_1539	extracellular solute-binding protein, family 5	617	Amino acid transport and metabolism	pfam00496		*	
MFLA_1485	binding-protein-dependent transport systems inner membrane component	274	Amino acid transport and metabolism	pfam00528		*	*
MFLA_2513	nitrogen regulatory protein P-II (IMGterm)	112	Amino acid transport and metabolism	pfam00543			
MFLA_1699	phosphoribosylanthranilate isomerase (EC 5.3.1.24) (IMGterm)	192	Amino acid transport and metabolism	pfam00697			
MFLA_1768	urease, beta subunit	102	Amino acid transport and metabolism	pfam00699	TIGR00192		
MFLA_0152	amino acid/amide ABC transporter substrate-binding protein, HAAT family (TC 3.A.1.4.-) (IMGterm)	432	Amino acid transport and metabolism	pfam01094	TIGR01409	*	
MFLA_0791	D-amino-acid dehydrogenase	417	Amino acid transport and metabolism	pfam01266			
MFLA_1390	protein of unknown function DUF752	622	Amino acid transport and metabolism	pfam01266 pfam05430	TIGR03197		
MFLA_0225	glycine cleavage system H protein	123	Amino acid transport and metabolism	pfam01597	TIGR00527		
MFLA_1365	Lysine exporter protein (LYSE/YGGA)	207	Amino acid transport and metabolism	pfam01810			*
MFLA_1795	Lysine exporter protein (LYSE/YGGA)	212	Amino acid transport and metabolism	pfam01810			*
MFLA_0393	transglutaminase-like protein	263	Amino acid transport and metabolism	pfam01841 pfam08379			

MFLA_0155	amino acid/amide ABC transporter membrane protein 1, HAAT family (TC 3.A.1.4.-) (IMGterm)	295	Amino acid transport and metabolism	pfam02653			
MFLA_1774	amino acid/amide ABC transporter membrane protein 1, HAAT family (TC 3.A.1.4.-) (IMGterm)	305	Amino acid transport and metabolism	pfam02653	TIGR03409		*
MFLA_1773	amino acid/amide ABC transporter membrane protein 2, HAAT family (TC 3.A.1.4.-) (IMGterm)	389	Amino acid transport and metabolism	pfam02653	TIGR03408		*
MFLA_0156	amino acid/amide ABC transporter membrane protein 2, HAAT family (TC 3.A.1.4.-) (IMGterm)	545	Amino acid transport and metabolism	pfam02653			
MFLA_1834	protein of unknown function DUF540	253	Amino acid transport and metabolism	pfam04401			*
MFLA_1441	Alcohol dehydrogenase GroES-like protein	390	Amino acid transport and metabolism	pfam08240			
MFLA_2652	1-aminocyclopropane-1-carboxylate deaminase-like protein	350	Amino acid transport and metabolism				
MFLA_0446	amino acid permease-associated region	562	Amino acid transport and metabolism			*	*
MFLA_0615	serine O-acetyltransferase (EC 2.3.1.30) (IMGterm)	317	Amino acid transport and metabolism		TIGR01172		
MFLA_2347	carbohydrate ABC transporter ATP-binding protein, CUT1 family (TC 3.A.1.1.-) (IMGterm)	379	Carbohydrate transport and metabolism	pfam00005 pfam08402			
MFLA_2654	major facilitator superfamily MFS_1	391	Carbohydrate transport and metabolism	pfam00083 pfam07690		*	*
MFLA_1416	maltooligosyl trehalose synthase (EC 5.4.99.15) (IMGterm)	941	Carbohydrate transport and metabolism	pfam00128	TIGR02401		
MFLA_1418	trehalose synthase (EC:5.4.99.16) (IMGterm)	1134	Carbohydrate transport and metabolism	pfam00128	TIGR02456 TIGR02457		
MFLA_1417	maltooligosyl trehalose hydrolase (EC 3.2.1.141) (IMGterm)	629	Carbohydrate transport and metabolism	pfam00128 pfam02922 pfam11941	TIGR02402		
MFLA_1419	alpha amylase, catalytic region	708	Carbohydrate transport and metabolism	pfam00128 pfam11896			
MFLA_0179	MIP family channel proteins	229	Carbohydrate transport and metabolism	pfam00230	TIGR00861	*	
MFLA_0962	ribose 5-phosphate isomerase	230	Carbohydrate transport and metabolism	pfam00455 pfam06026	TIGR00021		
MFLA_2349	carbohydrate ABC transporter membrane protein 1, CUT1 family (TC 3.A.1.1.-) (IMGterm)	307	Carbohydrate transport and metabolism	pfam00528			*
MFLA_2350	carbohydrate ABC transporter membrane protein 2, CUT1 family (TC 3.A.1.1.-)	272	Carbohydrate transport and metabolism	pfam00528			*

	(IMGterm)							
MFLA_1566	class II aldolase/adducin-like protein	242	Carbohydrate transport and metabolism	pfam00596				
MFLA_1451	Pyrrolo-quinoline quinone	616	Carbohydrate transport and metabolism	pfam01011 pfam10527 pfam10535	TIGR03075	*	*	
MFLA_2348	carbohydrate ABC transporter substrate-binding protein, CUT1 family (TC 3.A.1.1.-) (IMGterm)	363	Carbohydrate transport and metabolism	pfam01547		*		
MFLA_2136	major facilitator superfamily MFS_1	383	Carbohydrate transport and metabolism	pfam03825				*
MFLA_2622	major facilitator superfamily MFS_1	411	Carbohydrate transport and metabolism	pfam05977				*
MFLA_1677	Drug resistance transporter Bcr/CflA subfamily	401	Carbohydrate transport and metabolism	pfam07690	TIGR00710	*	*	
MFLA_0749	Drug resistance transporter Bcr/CflA subfamily	498	Carbohydrate transport and metabolism	pfam07690	TIGR00710 TIGR00880			*
MFLA_0523	Drug resistance transporter EmrB/QacA subfamily	481	Carbohydrate transport and metabolism	pfam07690	TIGR00711			*
MFLA_1201	major facilitator superfamily MFS_1	383	Carbohydrate transport and metabolism	pfam07690				*
MFLA_1193	hypothetical protein	397	Carbohydrate transport and metabolism					
MFLA_2284	phosphoheptose isomerase (EC 5.3.1.-) (IMGterm)	197	Carbohydrate transport and metabolism		TIGR00441			
MFLA_2495	cell elongation-specific peptidoglycan biosynthesis regulator RodA (IMGterm)	364	Cell cycle control, cell division, chromosome partitioning	pfam01098	TIGR02210	*	*	
MFLA_1221	camphor resistance protein CrcB (IMGterm)	128	Cell cycle control, cell division, chromosome partitioning	pfam02537	TIGR00494			*
MFLA_1878	intracellular septation protein A	179	Cell cycle control, cell division, chromosome partitioning	pfam04279	TIGR00997	*	*	
MFLA_1908	cell division protein FtsB (IMGterm)	106	Cell cycle control, cell division, chromosome partitioning	pfam04977				
MFLA_2276	Cell division protein, FtsL -like protein	86	Cell cycle control, cell division, chromosome partitioning	pfam04999	TIGR02209	*	*	
MFLA_1947	hypothetical protein	145	Cell cycle control, cell division, chromosome partitioning					
MFLA_1336	type II and III secretion system protein	653	Cell motility	pfam00263 pfam03958 pfam07660		*		
MFLA_0076	type II and III secretion system protein	539	Cell motility	pfam00263 pfam07655	TIGR02519			
MFLA_2419	type II secretion system protein E	559	Cell motility	pfam00437 pfam05157				
MFLA_1946	GTP-binding signal recognition particle SRP54, G-domain	536	Cell motility	pfam00448	TIGR03499			
MFLA_1958	Flagellar basal-body rod FlgF	246	Cell motility	pfam00460	TIGR02490			

				pfam06429	TIGR03506		
MFLA_2420	type II secretion system protein	393	Cell motility	pfam00482			*
MFLA_1342	type II secretion system protein	395	Cell motility	pfam00482			*
MFLA_0079	type II secretion system protein	401	Cell motility	pfam00482			
MFLA_1260	TPR repeat	573	Cell motility	pfam00515	TIGR02466		
MFLA_2392	OmpA/MotB	1402	Cell motility	pfam00691		*	
MFLA_1945	flagellar biosynthesis protein FlhA	690	Cell motility	pfam00771	TIGR01398	*	*
MFLA_1968	flagellar biosynthetic protein FliP	250	Cell motility	pfam00813	TIGR01103	*	*
MFLA_1966	flagellar biosynthetic protein FliR	266	Cell motility	pfam01311	TIGR01400		*
MFLA_1944	flagellar biosynthetic protein FlhB	381	Cell motility	pfam01312	TIGR00328		*
MFLA_1967	flagellar biosynthetic protein FliQ	89	Cell motility	pfam01313	TIGR01402		*
MFLA_1974	Flagellar export FliJ	150	Cell motility	pfam02050	TIGR02473		
MFLA_1960	flagellar L-ring protein	222	Cell motility	pfam02107		*	
MFLA_1976	flagellar assembly protein FliH	226	Cell motility	pfam02108			
MFLA_1985	flagellar protein FlaG protein	117	Cell motility	pfam03646			
MFLA_1969	flagellar biosynthesis protein, FliO	142	Cell motility	pfam04347	TIGR03500	*	*
MFLA_0084	methylation	247	Cell motility	pfam07963	TIGR02532	*	
MFLA_2413	methylation	157	Cell motility	pfam07963	TIGR02532		*
MFLA_2421	General secretion pathway protein G	142	Cell motility	pfam07963	TIGR01710		*
				pfam08334	TIGR02532		
MFLA_1343	General secretion pathway protein G	160	Cell motility	pfam07963	TIGR01710		*
				pfam08334	TIGR02532		
MFLA_1334	methylation	133	Cell motility	pfam07963	TIGR01710		*
				pfam08334	TIGR02532		
MFLA_2522	methylation	179	Cell motility	pfam07963	TIGR02532	*	*
				pfam12019			
MFLA_2412	methylation	126	Cell motility	pfam08334	TIGR01710	*	*
					TIGR02532		
MFLA_1953	Flageller protein FlgA	235	Cell motility	pfam08666	TIGR03170	*	
MFLA_1333	hypothetical protein	164	Cell motility			*	*
MFLA_0717	hypothetical protein	170	Cell motility			*	*
MFLA_2411	hypothetical protein	192	Cell motility			*	*
MFLA_2557	secretion protein HlyD	379	Cell wall/membrane/envelope biogenesis	pfam00529	TIGR01730	*	
MFLA_1792	secretion protein HlyD	412	Cell wall/membrane/envelope biogenesis	pfam00529	TIGR01730	*	
MFLA_2552	secretion protein HlyD	410	Cell wall/membrane/envelope biogenesis	pfam00529	TIGR00999		*
					TIGR01730		
MFLA_0790	1,2-diacylglycerol 3-glucosyltransferase (EC 2.4.1.157) (IMGterm)	400	Cell wall/membrane/envelope biogenesis	pfam00534			
MFLA_0487	glycosyl transferase, group 1	355	Cell wall/membrane/envelope biogenesis	pfam00534			

MFLA_0226	murein-DD-endopeptidase. Serine peptidase. MEROPS family S11 (IMGterm)	336	Cell wall/membrane/envelope biogenesis	pfam00768		*	
MFLA_0646	apolipoprotein N-acyltransferase	497	Cell wall/membrane/envelope biogenesis	pfam00795	TIGR00546	*	*
MFLA_0388	NLP/P60	170	Cell wall/membrane/envelope biogenesis	pfam00877		*	
MFLA_2444	Monofunctional biosynthetic peptidoglycan transglycosylase	229	Cell wall/membrane/envelope biogenesis	pfam00912	TIGR02070		*
MFLA_1452	MscS Mechanosensitive ion channel	355	Cell wall/membrane/envelope biogenesis	pfam00924			*
MFLA_1269	ABC-2	264	Cell wall/membrane/envelope biogenesis	pfam01061			*
MFLA_2207	signal peptidase II (EC:3.4.23.36). Aspartic peptidase. MEROPS family A08 (IMGterm)	151	Cell wall/membrane/envelope biogenesis	pfam01252	TIGR00077		*
MFLA_2260	NAD-dependent epimerase/dehydratase	321	Cell wall/membrane/envelope biogenesis	pfam01370			
MFLA_1438	NAD-dependent epimerase/dehydratase	450	Cell wall/membrane/envelope biogenesis	pfam01370			*
MFLA_2410	Lytic transglycosylase, catalytic	208	Cell wall/membrane/envelope biogenesis	pfam01464			*
MFLA_1482	Lytic transglycosylase, catalytic	518	Cell wall/membrane/envelope biogenesis	pfam01464 pfam01476		*	
MFLA_2235	peptidase M23B	288	Cell wall/membrane/envelope biogenesis	pfam01551		*	*
MFLA_2553	outer membrane efflux protein	421	Cell wall/membrane/envelope biogenesis	pfam02321		*	
MFLA_0502	outer membrane efflux protein	433	Cell wall/membrane/envelope biogenesis	pfam02321		*	*
MFLA_1630	outer membrane efflux protein	483	Cell wall/membrane/envelope biogenesis	pfam02321		*	
MFLA_2544	RND efflux system, outer membrane lipoprotein, NodT	467	Cell wall/membrane/envelope biogenesis	pfam02321	TIGR01845	*	
MFLA_1345	Type I secretion outer membrane protein, TolC	455	Cell wall/membrane/envelope biogenesis	pfam02321	TIGR01844	*	*
MFLA_0704	protein of unknown function DUF214	423	Cell wall/membrane/envelope biogenesis	pfam02687		*	*
MFLA_1194	UDP-galactopyranose mutase	379	Cell wall/membrane/envelope biogenesis	pfam03275	TIGR00031		
MFLA_2306	outer membrane transport energization protein TonB (TC 2.C.1.1.1) (IMGterm)	246	Cell wall/membrane/envelope biogenesis	pfam03544	TIGR01352		

MFLA_1560	outer membrane transport energization protein TonB (TC 2.C.1.1.1) (IMGterm)	276	Cell wall/membrane/envelope biogenesis	pfam03544	TIGR01352		
MFLA_2265	cell division protein FtsQ (IMGterm)	243	Cell wall/membrane/envelope biogenesis	pfam03799 pfam08478			*
MFLA_2493	Rod shape-determining protein MreD	159	Cell wall/membrane/envelope biogenesis	pfam04093	TIGR03426		*
MFLA_0422	hypothetical protein	381	Cell wall/membrane/envelope biogenesis	pfam04101			
MFLA_0798	hypothetical protein	185	Cell wall/membrane/envelope biogenesis	pfam04519			
MFLA_0059	protein of unknown function DUF583	100	Cell wall/membrane/envelope biogenesis	pfam04519			
MFLA_0951	Lipocalin-like protein	189	Cell wall/membrane/envelope biogenesis	pfam08212		*	
MFLA_2298	hypothetical protein	300	Cell wall/membrane/envelope biogenesis	pfam08310			
MFLA_1378	hypothetical protein	537	Cell wall/membrane/envelope biogenesis			*	*
MFLA_1631	hypothetical protein	350	Cell wall/membrane/envelope biogenesis				*
MFLA_0730	hypothetical protein	351	Cell wall/membrane/envelope biogenesis				*
MFLA_1195	hypothetical protein	420	Cell wall/membrane/envelope biogenesis				
MFLA_0503	secretion protein HlyD	390	Cell wall/membrane/envelope biogenesis		TIGR01730	*	
MFLA_1476	histone deacetylase superfamily	307	Chromatin structure and dynamics	pfam00850			
MFLA_0573	thiamine-phosphate kinase (IMGterm)	318	Coenzyme transport and metabolism	pfam00586 pfam02769	TIGR01379		
MFLA_0322	uroporphyrinogen-III C-methyltransferase (EC 2.1.1.107) (IMGterm)	277	Coenzyme transport and metabolism	pfam00590	TIGR01469		
MFLA_0054	4-hydroxybenzoate octaprenyltransferase (EC 2.5.1.-) (IMGterm)	296	Coenzyme transport and metabolism	pfam01040	TIGR01474 TIGR01475		
MFLA_1502	aminodeoxychorismate lyase apoprotein (EC 4.1.3.38) (IMGterm)	271	Coenzyme transport and metabolism	pfam01063	TIGR03461		
MFLA_0599	2-amino-4-hydroxy-6-hydroxymethyl-dihydropteridine pyrophosphokinase	163	Coenzyme transport and metabolism	pfam01288	TIGR01498		
MFLA_2159	nicotinate-nucleotide adenylyltransferase (EC 2.7.7.18) (IMGterm)	237	Coenzyme transport and metabolism	pfam01467	TIGR00125 TIGR00482		
MFLA_2160	dethiobiotin synthase	228	Coenzyme transport and metabolism	pfam01656	TIGR00347		
MFLA_0103	adenosylcobyrinic acid synthase	483	Coenzyme transport and metabolism	pfam01656	TIGR00313		

	(glutamine-hydrolysing) (EC 6.3.5.10) (IMGterm)			pfam07685			
MFLA_0594	aspartate 1-decarboxylase	126	Coenzyme transport and metabolism	pfam02261	TIGR00223		
MFLA_0099	cobalamin-5'-phosphate synthase (EC 2.7.8.26) (IMGterm)	254	Coenzyme transport and metabolism	pfam02654	TIGR00317	*	
MFLA_2500	lipoate-protein ligase B	218	Coenzyme transport and metabolism	pfam03099	TIGR00214		
MFLA_0102	adenosylcobinamide-phosphate synthase (EC 6.3.1.10) (IMGterm)	317	Coenzyme transport and metabolism	pfam03186	TIGR00380		
MFLA_2296	molybdopterin-guanine dinucleotide biosynthesis protein B	182	Coenzyme transport and metabolism	pfam03205	TIGR00176		
MFLA_0618	molybdenum-pterin binding domain	71	Coenzyme transport and metabolism	pfam03459	TIGR00638		
MFLA_0163	Methyltransferase type 11	149	Coenzyme transport and metabolism	pfam03848			
MFLA_1394	Methyltransferase type 12	177	Coenzyme transport and metabolism	pfam03848			
MFLA_2501	lipoic acid synthetase	325	Coenzyme transport and metabolism	pfam04055	TIGR00510		
MFLA_0560	GTP cyclohydrolase subunit MoaA (IMGterm)	329	Coenzyme transport and metabolism	pfam04055 pfam06463	TIGR02666		
MFLA_2294	GTP cyclohydrolase subunit MoaA (IMGterm)	343	Coenzyme transport and metabolism	pfam04055 pfam06463	TIGR02666		
MFLA_2295	molybdenum cofactor guanylyltransferase (IMGterm)	192	Coenzyme transport and metabolism		TIGR02665		
MFLA_0705	ABC transporter related	232	Defense mechanisms	pfam00005			
MFLA_1192	ABC transporter related	587	Defense mechanisms	pfam00005 pfam00664		*	*
MFLA_1548	ABC transporter related	593	Defense mechanisms	pfam00005 pfam00664		*	*
MFLA_1554	ABC transporter related	612	Defense mechanisms	pfam00005 pfam00664			*
MFLA_1549	ABC transporter related	613	Defense mechanisms	pfam00005 pfam00664			*
MFLA_1346	Type I secretion membrane fusion protein, HlyD	462	Defense mechanisms	pfam00529	TIGR01843		*
MFLA_2546	Cation/multidrug efflux pump-like protein	186	Defense mechanisms	pfam00873			*
MFLA_1793	Hydrophobe/amphiphile efflux-1 HAE1	1062	Defense mechanisms	pfam00873	TIGR00915	*	*
MFLA_2556	RND multidrug efflux transporter MexB	394	Defense mechanisms	pfam00873			*
MFLA_2545	RND multidrug efflux transporter MexB	440	Defense mechanisms	pfam00873			*
MFLA_2373		1058	Defense mechanisms	pfam00873			*
MFLA_2239	ABC-2	268	Defense mechanisms	pfam01061			*
MFLA_0166	ABC-2	374	Defense mechanisms	pfam01061			
MFLA_2707	N-acetylmuramoyl-L-alanine amidase, family 2	184	Defense mechanisms	pfam01510			
MFLA_2527	Undecaprenyl-diphosphatase (EC	269	Defense mechanisms	pfam02673	TIGR00753		*

3.6.1.27) (IMGterm)							
MFLA_1450	cytochrome c, class I	169	Energy production and conversion	pfam00034		*	
MFLA_1432	cytochrome c, class I	217	Energy production and conversion	pfam00034			*
MFLA_2578	hypothetical protein	130	Energy production and conversion	pfam00034		*	*
MFLA_1449	cytochrome c oxidase, subunit II	346	Energy production and conversion	pfam00034 pfam00116	TIGR02866	*	*
MFLA_0850	electron transport complex, RnfABCDGE type, B subunit	216	Energy production and conversion	pfam00037 pfam04060 pfam00070	TIGR01944		
MFLA_2173	Rubredoxin-type Fe(Cys) ₄ protein	415	Energy production and conversion	pfam00301 pfam07992			
MFLA_0319	assimilatory nitrite reductase (NAD(P)H) large subunit precursor (EC 1.7.1.4) (IMGterm)	854	Energy production and conversion	pfam00070 pfam01077 pfam03460 pfam04324 pfam07992	TIGR02374		
MFLA_1222	thioredoxin-related	112	Energy production and conversion	pfam00085			
MFLA_1225	ferredoxin	139	Energy production and conversion	pfam00111			
MFLA_0441	ferredoxin	317	Energy production and conversion	pfam00111 pfam00175 pfam00970			
MFLA_1448	Cytochrome-c oxidase	631	Energy production and conversion	pfam00115	TIGR02891		*
MFLA_2750	ATP synthase F ₀ subcomplex A subunit (IMGterm)	267	Energy production and conversion	pfam00119	TIGR01131		*
MFLA_2054	NADH dehydrogenase subunit H (EC 1.6.5.3) (IMGterm)	339	Energy production and conversion	pfam00146			*
MFLA_1535	Alkanesulfonate monooxygenase	354	Energy production and conversion	pfam00296			
MFLA_1534	Alkanesulfonate monooxygenase	389	Energy production and conversion	pfam00296			
MFLA_1789	luciferase-like protein	333	Energy production and conversion	pfam00296	TIGR03558		
MFLA_1544	luciferase-like protein	449	Energy production and conversion	pfam00296			
MFLA_2352	nitrilotriacetate monooxygenase, A subunit, putative	434	Energy production and conversion	pfam00296			
MFLA_0580	NADH dehydrogenase (quinone)	510	Energy production and conversion	pfam00361			*
MFLA_2049	NADH dehydrogenase subunit M (EC 1.6.5.3) (IMGterm)	495	Energy production and conversion	pfam00361	TIGR01972		*
MFLA_2048	NADH dehydrogenase subunit N (EC 1.6.5.3) (IMGterm)	482	Energy production and conversion	pfam00361	TIGR01770		*
MFLA_2050	NADH dehydrogenase subunit L (EC 1.6.5.3) (IMGterm)	670	Energy production and conversion	pfam00361 pfam00662	TIGR01974	*	*
MFLA_0209	sodium:dicarboxylate symporter	419	Energy production and conversion	pfam00375			
MFLA_2051	NADH dehydrogenase subunit K (EC 1.6.5.3) (IMGterm)	102	Energy production and conversion	pfam00420			*

MFLA_2061	NADH dehydrogenase subunit A (EC 1.6.5.3) (IMGterm)	118	Energy production and conversion	pfam00507		*
MFLA_1293	cytochrome bo3 quinol oxidase subunit 3 (EC 1.10.3.-) (IMGterm)	205	Energy production and conversion	pfam00510	TIGR02842	*
MFLA_1447	cytochrome c oxidase, subunit III	203	Energy production and conversion	pfam00510		*
MFLA_0027	alkyl hydroperoxide reductase/ Thiol specific antioxidant/ Mal allergen	185	Energy production and conversion	pfam00578		*
MFLA_0741	acetate kinase (EC 2.7.2.1) (IMGterm)	395	Energy production and conversion	pfam00871	TIGR00016	
MFLA_1538	nitroreductase	203	Energy production and conversion	pfam00881		
MFLA_2303	cytochrome B561	187	Energy production and conversion	pfam01292		*
MFLA_0669		397	Energy production and conversion	pfam01494		*
MFLA_0943	cytochrome bd quinol oxidase subunit 1 apoprotein (EC 1.10.3.-) (IMGterm)	476	Energy production and conversion	pfam01654		*
MFLA_0942	cytochrome bd quinol oxidase subunit 2 apoprotein (EC 1.10.3.-) (IMGterm)	335	Energy production and conversion	pfam02322	TIGR00203	*
MFLA_1433	cytochrome C oxidase, mono-heme subunit/FixO	206	Energy production and conversion	pfam02433	TIGR00781	*
MFLA_0719	formate dehydrogenase family accessory protein FdhD	278	Energy production and conversion	pfam02634	TIGR00129	
MFLA_2104	Twin-arginine translocation pathway signal	483	Energy production and conversion	pfam03069		
MFLA_1292	cytochrome bo3 quinol oxidase subunit 4 (EC 1.10.3.-) (IMGterm)	112	Energy production and conversion	pfam03626	TIGR02847	*
MFLA_1991	protein of unknown function DUF1111	450	Energy production and conversion	pfam06537		*
MFLA_1799	major facilitator superfamily MFS_1	429	Energy production and conversion	pfam07690		*
MFLA_1379	4Fe-4S cluster binding	355	Energy production and conversion	pfam08331	TIGR00276	
MFLA_0901	4Fe-4S ferredoxin, iron-sulfur binding	461	Energy production and conversion	pfam11614	TIGR02745	*
MFLA_0738	4Fe-4S ferredoxin, iron-sulfur binding	85	Energy production and conversion			
MFLA_1421	phospholipase D/Transphosphatidylase	730	Function unknown	pfam00614 pfam09335		*
MFLA_0243	ABC-2	259	Function unknown	pfam01061		
MFLA_1980	putative flagellar biosynthetic protein	102	Function unknown	pfam01312	TIGR00789	
MFLA_0806	iron-sulfur cluster assembly protein IscA	107	Function unknown	pfam01521	TIGR00049 TIGR02011	
MFLA_1118	Smr protein/MutS2	179	Function unknown	pfam01713		
MFLA_2759	protein of unknown function DUF37	70	Function unknown	pfam01809	TIGR00278	
MFLA_0519	putative integral membrane protein	235	Function unknown	pfam01891		*
MFLA_0353	protein of unknown function DUF72	259	Function unknown	pfam01904		*
MFLA_0623	ATP:cob(I)alamin adenosyltransferase (IMGterm)	191	Function unknown	pfam01923	TIGR00636	
MFLA_1783	hypothetical protein	420	Function unknown	pfam02308		*
MFLA_0175	MgtC/SapB transporter	229	Function unknown	pfam02308		

MFLA_1846	protein of unknown function DUF165	232	Function unknown	pfam02592	TIGR00697		*
MFLA_1874	condensin subunit ScpA (IMGterm)	266	Function unknown	pfam02616			
MFLA_0952	protein of unknown function DUF188	150	Function unknown	pfam02639			
MFLA_1871	protein of unknown function DUF202	120	Function unknown	pfam02656			*
MFLA_1363	protein of unknown function DUF204	189	Function unknown	pfam02659		*	*
MFLA_2327	acyl-phosphate glycerol-3-phosphate acyltransferase (IMGterm)	196	Function unknown	pfam02660	TIGR00023	*	*
MFLA_0485	protein of unknown function UPF0060	108	Function unknown	pfam02694		*	*
MFLA_2554	protein of unknown function UPF0060	110	Function unknown	pfam02694		*	*
MFLA_2634	Extradiol ring-cleavage dioxygenase, class III enzyme, subunit B	258	Function unknown	pfam02900			
MFLA_1808	Uncharacterized protein UPF0114	176	Function unknown	pfam03350	TIGR00645		*
MFLA_0659	cyclase/dehydrase	158	Function unknown	pfam03364			
MFLA_1209	ribonuclease BN	312	Function unknown	pfam03631	TIGR00765		*
MFLA_0474	conserved hypothetical protein 701	137	Function unknown	pfam03653	TIGR00701		*
MFLA_1143	protein of unknown function UPF0125	110	Function unknown	pfam03658			
MFLA_2539	Outer membrane autotransporter barrel	1778	Function unknown	pfam03797	TIGR01414	*	
MFLA_2228	protein of unknown function DUF329	62	Function unknown	pfam03884			
MFLA_0192	membrane protein of unknown function	115	Function unknown	pfam04020		*	
MFLA_1471	membrane protein of unknown function	137	Function unknown	pfam04020			*
MFLA_0674	hypothetical protein	143	Function unknown	pfam04239			
MFLA_1115	protein of unknown function DUF454	129	Function unknown	pfam04304		*	*
MFLA_2192	hypothetical protein	117	Function unknown	pfam04314			
MFLA_0047	protein of unknown function DUF475	348	Function unknown	pfam04332		*	
MFLA_0657	protein of unknown function DUF482	373	Function unknown	pfam04339			
MFLA_2499	protein of unknown function DUF493	97	Function unknown	pfam04359			
MFLA_0190	protein of unknown function DUF494	150	Function unknown	pfam04361			
MFLA_2385	protein of unknown function DUF502	200	Function unknown	pfam04367			*
MFLA_0902	protein of unknown function DUF498	141	Function unknown	pfam04430			
MFLA_2583	Fusaric acid resistance protein conserved region	727	Function unknown	pfam04632			*
MFLA_0896	Rhs element Vgr protein	545	Function unknown	pfam04717	TIGR01646		
MFLA_1375	hypothetical protein	272	Function unknown	pfam05954			
MFLA_0403	transmembrane pair	151	Function unknown	pfam04794			
MFLA_2651	Csbd-like protein	68	Function unknown	pfam05232		*	*
MFLA_2241	protein of unknown function DUF1232	89	Function unknown	pfam05532			
MFLA_0180	protein of unknown function DUF1275	236	Function unknown	pfam06803			*
MFLA_2428	hypothetical protein	302	Function unknown	pfam06912			
MFLA_0160	YaeQ	193	Function unknown	pfam06977	TIGR02595	*	
				pfam07589			
				pfam07152			

MFLA_0940	hypothetical protein	184	Function unknown	pfam07446	*	*
MFLA_2205	DoxX	124	Function unknown	pfam07681		*
MFLA_2633	DoxX	128	Function unknown	pfam07681		*
MFLA_2430	DoxX	134	Function unknown	pfam07681		*
MFLA_1610	Cupin 2, conserved barrel	143	Function unknown	pfam07883	*	
MFLA_2631	Entericidin EcnAB	44	Function unknown	pfam08085	*	
MFLA_2729	hypothetical protein	115	Function unknown	pfam08765		
MFLA_1749	hypothetical protein	212	Function unknown	pfam09335		*
MFLA_1445	hypothetical protein	300	Function unknown	pfam09678	*	*
MFLA_2689	hypothetical protein	1056	Function unknown	pfam09718	TIGR01541 TIGR02675	
MFLA_1585	hypothetical protein	61	Function unknown	pfam09838		*
MFLA_2475	hypothetical protein	143	Function unknown	pfam09900	*	*
MFLA_0116	hypothetical protein	103	Function unknown	pfam09919		
MFLA_2659	hypothetical protein	79	Function unknown	pfam09939		
MFLA_1428	hypothetical protein	170	Function unknown	pfam09990		*
MFLA_1437	integral membrane protein	154	Function unknown	pfam10027	*	*
MFLA_0621	hypothetical protein	66	Function unknown	pfam10055		
MFLA_0619	hypothetical protein	119	Function unknown	pfam10087		
MFLA_1754	hypothetical protein	366	Function unknown	pfam10093		
MFLA_0852	hypothetical protein	366	Function unknown	pfam10442		
MFLA_0703	hypothetical protein	204	Function unknown	pfam11736	*	
MFLA_0673	hypothetical protein	184	Function unknown		*	
MFLA_2482	hypothetical protein	221	Function unknown		*	*
MFLA_1284	hypothetical protein	637	Function unknown		*	
MFLA_0110	hypothetical protein	70	Function unknown			
MFLA_0712	hypothetical protein	70	Function unknown			
MFLA_0149	hypothetical protein	113	Function unknown			
MFLA_1163	hypothetical protein	203	Function unknown			*
MFLA_2685	Phage-related protein tail component-like protein	1171	Function unknown			*
MFLA_0096	Prolyl 4-hydroxylase, alpha subunit	176	Function unknown			
MFLA_0201	transmembrane protein, twin-arginine translocation pathway signal	150	Function unknown		*	
MFLA_1348	Type I secretion system ATPase, PrtD	556	General function prediction only	pfam00005	TIGR01842	*
MFLA_1347	Type I secretion system ATPase, PrtD	568	General function prediction only	pfam00005	TIGR01842	*
MFLA_2391	ABC transporter related	470	General function prediction only	pfam00005 pfam08352		
MFLA_1540	ABC transporter related	533	General function prediction only	pfam00005 pfam08352	TIGR02323	
MFLA_0562	4Fe-4S ferredoxin, iron-sulfur binding	101	General function prediction only	pfam00037 pfam11953		

MFLA_2135	conserved hypothetical protein, predicted peptidase aspartic family	213	General function prediction only	pfam00077	TIGR02281	*	
MFLA_0589	short-chain dehydrogenase/reductase SDR	285	General function prediction only	pfam00106		*	
MFLA_0588	short-chain dehydrogenase/reductase SDR	247	General function prediction only	pfam00106			
MFLA_2676	short-chain dehydrogenase/reductase SDR	264	General function prediction only	pfam00106			
MFLA_1732	Alcohol dehydrogenase, zinc-binding	269	General function prediction only	pfam00107			
MFLA_0900	metallophosphoesterase	536	General function prediction only	pfam00149 pfam07589	TIGR02595	*	*
MFLA_2181	hypothetical protein	227	General function prediction only	pfam00156	TIGR00201	*	
MFLA_0318	assimilatory nitrite reductase (NAD(P)H) small subunit (EC 1.7.1.4) (IMGterm)	130	General function prediction only	pfam00355	TIGR02378		
MFLA_1542	binding-protein-dependent transport systems inner membrane component	352	General function prediction only	pfam00528			*
MFLA_1541	binding-protein-dependent transport systems inner membrane component	376	General function prediction only	pfam00528			*
MFLA_1490	putative signal transduction protein with CBS domains	150	General function prediction only	pfam00571			
MFLA_0436	Acetyltransferase, GNAT family (IMGterm)	153	General function prediction only	pfam00583			
MFLA_1536	Haloacid dehalogenase-like hydrolase	223	General function prediction only	pfam00702			
MFLA_2128	beta-lactamase-like protein	254	General function prediction only	pfam00753			
MFLA_0841	beta-lactamase-like protein	257	General function prediction only	pfam00753			
MFLA_2168	beta-lactamase-like protein	284	General function prediction only	pfam00753			
MFLA_1496	putative hydrolase protein	100	General function prediction only	pfam00753			
MFLA_2093	DNA internalization-related competence protein ComEC/Rec2	802	General function prediction only	pfam00753 pfam03772	TIGR00360 TIGR00361		*
MFLA_0469	ornithine-acyl[acyl carrier protein] N-acyltransferase (IMGterm)	249	General function prediction only	pfam00765			
MFLA_0463	Nitrilase/cyanide hydratase and apolipoprotein N-acyltransferase	339	General function prediction only	pfam00795			
MFLA_1133	protein of unknown function DUF6, transmembrane	294	General function prediction only	pfam00892	TIGR00688	*	*
MFLA_2478	protein of unknown function DUF6, transmembrane	304	General function prediction only	pfam00892		*	*
MFLA_2356	protein of unknown function DUF6, transmembrane	305	General function prediction only	pfam00892		*	*
MFLA_1712	protein of unknown function DUF6, transmembrane	277	General function prediction only	pfam00892			*
MFLA_2576	protein of unknown function DUF6,	329	General function prediction only	pfam00892			*

	transmembrane						
MFLA_0821	glycoside hydrolase, family 24	225	General function prediction only	pfam00959			*
MFLA_1843	protein of unknown function UPF0005	201	General function prediction only	pfam01027			*
MFLA_2504	pyridoxamine 5'-phosphate oxidase-related, FMN-binding	218	General function prediction only	pfam01243			
MFLA_0521	cytochrome c assembly protein	269	General function prediction only	pfam01578			*
MFLA_0959	Secretion chaperone CsaA	112	General function prediction only	pfam01588	TIGR02222		
MFLA_0590	hypothetical protein	185	General function prediction only	pfam01613			
MFLA_1287	aminoglycoside phosphotransferase	330	General function prediction only	pfam01636			
MFLA_1842	Rhomboid-like protein	356	General function prediction only	pfam01694			*
MFLA_1174	protein of unknown function DUF45	120	General function prediction only	pfam01863			
MFLA_0641	protein of unknown function DUF45	236	General function prediction only	pfam01863			
MFLA_1838	protein of unknown function DUF58	317	General function prediction only	pfam01882			*
MFLA_2452	DNA polymerase, beta-like region	96	General function prediction only	pfam01909			
MFLA_1809	protein of unknown function DUF81	264	General function prediction only	pfam01925		*	*
MFLA_2167	protein of unknown function DUF81	268	General function prediction only	pfam01925		*	*
MFLA_1552	protein of unknown function DUF81	344	General function prediction only	pfam01925		*	*
MFLA_2237	protein of unknown function DUF81	263	General function prediction only	pfam01925			*
MFLA_1670	protein of unknown function DUF81	289	General function prediction only	pfam01925			*
MFLA_1274	polysaccharide export protein	399	General function prediction only	pfam01943			*
MFLA_0649	protein of unknown function UPF0054	149	General function prediction only	pfam02130	TIGR00043		
MFLA_1875	peptidase M50	213	General function prediction only	pfam02163			*
MFLA_0231	tRNA (guanine-N(7)-)-methyltransferase (EC 2.1.1.33) (IMGterm)	238	General function prediction only	pfam02390	TIGR00091		
MFLA_1231	cobalamin synthesis protein, P47K	406	General function prediction only	pfam02492 pfam07683			
MFLA_2362	NAD(P)H dehydrogenase (quinone)	205	General function prediction only	pfam02525		*	
MFLA_0569	regulatory protein RecX	155	General function prediction only	pfam02631			
MFLA_1693	Colicin V production protein	163	General function prediction only	pfam02674			*
MFLA_2210	integral membrane protein MviN	513	General function prediction only	pfam03023	TIGR01695	*	*
MFLA_2343	4-hydroxybenzoyl-CoA thioesterase	136	General function prediction only	pfam03061	TIGR00051 TIGR02799		
MFLA_2701	Mu-like prophage FluMu protein gp28-like	595	General function prediction only	pfam03237			
MFLA_1823	flavodoxin/nitric oxide synthase	199	General function prediction only	pfam03358	TIGR01755		
MFLA_1422	Endonuclease/exonuclease/phosphatase	235	General function prediction only	pfam03372			
MFLA_0220	permease YjgP/YjgQ	356	General function prediction only	pfam03739			
MFLA_1731	Antibiotic biosynthesis monooxygenase	122	General function prediction only	pfam03992			
MFLA_1810	protein of unknown function DUF395, YeeE/YedE	141	General function prediction only	pfam04143		*	*
MFLA_1811	protein of unknown function DUF395, YeeE/YedE	140	General function prediction only	pfam04143			*

MFLA_0030	FxsA cytoplasmic membrane protein	142	General function prediction only	pfam04186			
MFLA_1429	copper resistance protein CopC	120	General function prediction only	pfam04234		*	*
MFLA_0010	transport-associated	101	General function prediction only	pfam04972		*	
MFLA_1796	transport-associated	108	General function prediction only	pfam04972		*	
MFLA_0950	transport-associated	171	General function prediction only	pfam04972		*	*
MFLA_0897	hypothetical protein	499	General function prediction only	pfam04984			
MFLA_0165	23S rRNA m(6)A-1618 methyltransferase (EC 2.1.1.48) (IMGterm)	336	General function prediction only	pfam05971			
MFLA_2233	protein of unknown function DUF1289	61	General function prediction only	pfam06945			
MFLA_1895	ATPase associated with various cellular activities, AAA_3	338	General function prediction only	pfam07726			
MFLA_0097	Sell	254	General function prediction only	pfam08238			
MFLA_2258	hypothetical protein	329	General function prediction only			*	*
MFLA_2429	hypothetical protein	99	General function prediction only				
MFLA_1896	hypothetical protein	286	General function prediction only				
MFLA_0688	hypothetical protein	287	General function prediction only				
MFLA_2479	putative carbonic anhydrase, family 3	180	General function prediction only				
MFLA_1487	putative hydrolase protein	150	General function prediction only				
MFLA_2256	Pyrimidine 5-nucleotidase	241	General function prediction only			TIGR01509	TIGR01993
MFLA_1759	Radical SAM	411	General function prediction only				
MFLA_0241	STAS domain	85	General function prediction only				
MFLA_2560	ABC transporter related	271	Inorganic ion transport and metabolism	pfam00005			
MFLA_1561	ABC transporter related	291	Inorganic ion transport and metabolism	pfam00005			
MFLA_1857	ABC transporter related	304	Inorganic ion transport and metabolism	pfam00005			
MFLA_0325	nitrate transport ATP-binding subunits C and D	268	Inorganic ion transport and metabolism	pfam00005		TIGR01184	
MFLA_0317	sulfite reductase (NADPH) alpha subunit (EC 1.8.1.2) (IMGterm)	1383	Inorganic ion transport and metabolism	pfam00175 pfam00258 pfam00384 pfam00667 pfam01568 pfam04879		TIGR01931	
MFLA_2377	Catalase	712	Inorganic ion transport and metabolism	pfam00199 pfam06628			
MFLA_1206	Alkaline phosphatase	505	Inorganic ion transport and metabolism	pfam00245		*	
MFLA_0451	Alkaline phosphatase	497	Inorganic ion transport and metabolism	pfam00245 pfam07589		TIGR02595	* *
MFLA_0582	NADH dehydrogenase (quinone)	966	Inorganic ion transport and metabolism	pfam00361 pfam00662 pfam04039		TIGR00943	*
MFLA_0581	NADH-ubiquinone oxidoreductase, chain	106	Inorganic ion transport and metabolism	pfam00420			*

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MFLA_1847	binding-protein-dependent transport systems inner membrane component	264	Inorganic ion transport and metabolism	pfam00528		*	*
MFLA_1858	binding-protein-dependent transport systems inner membrane component	321	Inorganic ion transport and metabolism	pfam00528		*	*
MFLA_2389	binding-protein-dependent transport systems inner membrane component	323	Inorganic ion transport and metabolism	pfam00528		*	*
MFLA_1556	binding-protein-dependent transport systems inner membrane component	260	Inorganic ion transport and metabolism	pfam00528			*
MFLA_2390	binding-protein-dependent transport systems inner membrane component	266	Inorganic ion transport and metabolism	pfam00528			*
MFLA_1557	binding-protein-dependent transport systems inner membrane component	272	Inorganic ion transport and metabolism	pfam00528			*
MFLA_2559	binding-protein-dependent transport systems inner membrane component	283	Inorganic ion transport and metabolism	pfam00528			*
MFLA_1848	binding-protein-dependent transport systems inner membrane component	303	Inorganic ion transport and metabolism	pfam00528			*
MFLA_1392	Molybdate ABC transporter, permease protein	226	Inorganic ion transport and metabolism	pfam00528	TIGR02141		*
MFLA_2171	nitrate transport permease	272	Inorganic ion transport and metabolism	pfam00528	TIGR01183	*	*
MFLA_0326	nitrate transport permease	295	Inorganic ion transport and metabolism	pfam00528	TIGR01183		*
MFLA_0794	phosphate ABC transporter membrane protein 1, PhoT family (TC 3.A.1.7.1) (IMGterm)	320	Inorganic ion transport and metabolism	pfam00528	TIGR00974 TIGR02138		*
MFLA_0610	Sulfate ABC transporter, permease protein CysW	298	Inorganic ion transport and metabolism	pfam00528	TIGR00969 TIGR02140	*	*
MFLA_0793	phosphate ABC transporter membrane protein 2, PhoT family (TC 3.A.1.7.1) (IMGterm)	312	Inorganic ion transport and metabolism	pfam00528 pfam11812	TIGR00974		*
MFLA_0094	Rhodanese-like protein	110	Inorganic ion transport and metabolism	pfam00581			
MFLA_0833	TonB-dependent receptor	411	Inorganic ion transport and metabolism	pfam00593			
MFLA_2679	TonB-dependent receptor	1054	Inorganic ion transport and metabolism	pfam00593 pfam07660 pfam07715		*	*
MFLA_1351	TonB-dependent receptor	1188	Inorganic ion transport and metabolism	pfam00593 pfam07660 pfam07715		*	
MFLA_1989	TonB-dependent receptor	675	Inorganic ion transport and metabolism	pfam00593 pfam07715		*	
MFLA_2351	TonB-dependent receptor	761	Inorganic ion transport and metabolism	pfam00593 pfam07715		*	*
MFLA_1599	TonB-dependent receptor, plug	800	Inorganic ion transport and metabolism	pfam00593	TIGR01785	*	

					pfam07715			
MFLA_0095	TonB-dependent siderophore receptor	823	Inorganic ion transport and metabolism	pfam00593	TIGR01783			
				pfam07715				
MFLA_1632	acriflavin resistance protein	1046	Inorganic ion transport and metabolism	pfam00873	TIGR00914	*		*
MFLA_1634	small multidrug resistance protein	105	Inorganic ion transport and metabolism	pfam00893				*
MFLA_0883	small multidrug resistance protein	110	Inorganic ion transport and metabolism	pfam00893				*
MFLA_0434	ammonium transporter (IMGterm)	434	Inorganic ion transport and metabolism	pfam00909	TIGR00836	*		*
MFLA_1757	ammonium transporter (IMGterm)	437	Inorganic ion transport and metabolism	pfam00909	TIGR00836	*		*
MFLA_2514	ammonium transporter (IMGterm)	461	Inorganic ion transport and metabolism	pfam00909	TIGR00836	*		*
				pfam00916				
MFLA_0005	sulphate transporter	511	Inorganic ion transport and metabolism	pfam01740				
MFLA_1130	sodium/hydrogen exchanger	586	Inorganic ion transport and metabolism	pfam00999				*
				pfam00999				
MFLA_2361	Potassium efflux system protein	618	Inorganic ion transport and metabolism	pfam02254	TIGR00932			*
				pfam01032		*		*
MFLA_1606	transport system permease protein	368	Inorganic ion transport and metabolism	pfam01032				*
MFLA_0331	formate/nitrite transporter	270	Inorganic ion transport and metabolism	pfam01226	TIGR00790			*
				pfam01545				
MFLA_1806	cation diffusion facilitator family transporter	325	Inorganic ion transport and metabolism	pfam01545	TIGR01297			*
				pfam01545				*
MFLA_0409	cation efflux protein	204	Inorganic ion transport and metabolism	pfam01545				*
MFLA_0694	Co/Zn/Cd efflux system component	297	Inorganic ion transport and metabolism	pfam01545				*
MFLA_1489	Arsenical pump membrane protein	428	Inorganic ion transport and metabolism	pfam02040	TIGR00935			*
MFLA_2441	Chromate transporter	404	Inorganic ion transport and metabolism	pfam02417	TIGR00937			*
MFLA_0707	zinc/iron permease	251	Inorganic ion transport and metabolism	pfam02535		*		*
MFLA_1597	zinc/iron permease	258	Inorganic ion transport and metabolism	pfam02535		*		*
MFLA_0387	zinc/iron permease	300	Inorganic ion transport and metabolism	pfam02535				*
MFLA_1721	Na ⁺ /Pi-cotransporter	539	Inorganic ion transport and metabolism	pfam02690	TIGR00704			*
MFLA_0029	CutA1 divalent ion tolerance protein	115	Inorganic ion transport and metabolism	pfam03091				
MFLA_0577	Na ⁺ /H ⁺ antiporter subunit	122	Inorganic ion transport and metabolism	pfam03334	TIGR01300			*
				pfam03597				
MFLA_0701	cytochrome oxidase maturation protein, cbb3-type	68	Inorganic ion transport and metabolism	pfam03597	TIGR00847	*		*
				pfam03741				*
MFLA_2105	Integral membrane protein TerC	250	Inorganic ion transport and metabolism	pfam03741				*
				pfam03831				
MFLA_0958	alkylphosphonate utilization operon protein PhnA	112	Inorganic ion transport and metabolism	pfam08274	TIGR00686			
				pfam04066				*
MFLA_0578	multiple resistance and pH regulation protein F	89	Inorganic ion transport and metabolism	pfam04066				*
				pfam04324				
MFLA_0638	BFD-like (2Fe-2S)-binding region	77	Inorganic ion transport and metabolism	pfam04324				
MFLA_2680	putative FecR	320	Inorganic ion transport and metabolism	pfam04773				
MFLA_1352	putative FecR	348	Inorganic ion transport and metabolism	pfam04773				*
MFLA_1436	Catalase	293	Inorganic ion transport and metabolism	pfam05067				
				pfam07396		*		
MFLA_0801	phosphate-selective porin O and P	473	Inorganic ion transport and metabolism	pfam07396				
MFLA_1289	major facilitator superfamily MFS_1	402	Inorganic ion transport and metabolism	pfam07690	TIGR00896			*
MFLA_0321	Nitrate transporter	403	Inorganic ion transport and metabolism	pfam07690	TIGR00886			*

MFLA_0891	Twin-arginine translocation pathway signal	395	Inorganic ion transport and metabolism	pfam07690			*
MFLA_2031	TonB-dependent receptor, plug	317	Inorganic ion transport and metabolism	pfam07715		*	
MFLA_0708	TonB-dependent receptor, plug	744	Inorganic ion transport and metabolism	pfam07715			
MFLA_1859	ABC transport system substrate-binding protein	330	Inorganic ion transport and metabolism	pfam09084		*	
MFLA_2561	NLPA lipoprotein	339	Inorganic ion transport and metabolism	pfam09084		*	*
MFLA_1563	sulfonate ABC transporter, periplasmic sulfonate-binding protein SsuA	348	Inorganic ion transport and metabolism	pfam09084		*	
MFLA_1564	sulfonate ABC transporter, periplasmic sulfonate-binding protein SsuA	364	Inorganic ion transport and metabolism	pfam09084		*	
MFLA_1550	thermophilic desulfurizing enzyme, TdsB protein	347	Inorganic ion transport and metabolism	pfam09084			
MFLA_1565	monooxygenase, putative	352	Inorganic ion transport and metabolism				
MFLA_0327	nitrate transporter periplasmic component	433	Inorganic ion transport and metabolism				
MFLA_1546	thermophilic desulfurizing enzyme, TdsB protein	355	Inorganic ion transport and metabolism				
MFLA_1457	type II and III secretion system protein	395	Intracellular trafficking, secretion, and vesicular transport	pfam00263			
MFLA_1341	type II secretion system protein E	570	Intracellular trafficking, secretion, and vesicular transport	pfam00437 pfam05157			
MFLA_0266	protein translocase subunit secE/sec61 gamma (IMGterm)	115	Intracellular trafficking, secretion, and vesicular transport	pfam00584	TIGR00964	*	*
MFLA_0544	Sec-independent protein translocase TatC (IMGterm)	246	Intracellular trafficking, secretion, and vesicular transport	pfam00902	TIGR00945	*	*
MFLA_0260	Sec-independent protein translocase TatC (IMGterm)	244	Intracellular trafficking, secretion, and vesicular transport	pfam00902	TIGR00945		*
MFLA_2406	hemolysin activation/secretion protein	547	Intracellular trafficking, secretion, and vesicular transport	pfam01103 pfam08479		*	
MFLA_2225	type 4 prepilin peptidase 1 (EC:3.4.23.43). Aspartic peptidase. MEROPS family A24A (IMGterm)	288	Intracellular trafficking, secretion, and vesicular transport	pfam01478 pfam06750			*
MFLA_0117	outer membrane transport energization protein ExbB (TC 2.C.1.1.1) (IMGterm)	145	Intracellular trafficking, secretion, and vesicular transport	pfam01618			
MFLA_1559	outer membrane transport energization protein ExbB (TC 2.C.1.1.1) (IMGterm)	244	Intracellular trafficking, secretion, and vesicular transport	pfam01618			*
MFLA_2404	outer membrane transport energization protein ExbB (TC 2.C.1.1.1) (IMGterm)	555	Intracellular trafficking, secretion, and vesicular transport	pfam01618 pfam10102		*	*
MFLA_0450	multiple antibiotic resistance (MarC)-related proteins	219	Intracellular trafficking, secretion, and vesicular transport	pfam01914	TIGR00427		*
MFLA_2568	outer membrane efflux protein	438	Intracellular trafficking, secretion, and vesicular transport	pfam02321		*	

MFLA_1794	RND efflux system, outer membrane lipoprotein, NodT	486	Intracellular trafficking, secretion, and vesicular transport	pfam02321	TIGR01845	*	
MFLA_0542	twin-arginine translocation protein, TatA/E family	54	Intracellular trafficking, secretion, and vesicular transport	pfam02416	TIGR01411		*
MFLA_2402	outer membrane transport energization protein ExbD (TC 2.C.1.1.1) (IMGterm)	134	Intracellular trafficking, secretion, and vesicular transport	pfam02472			*
MFLA_1558	outer membrane transport energization protein ExbD (TC 2.C.1.1.1) (IMGterm)	135	Intracellular trafficking, secretion, and vesicular transport	pfam02472			*
MFLA_2403	outer membrane transport energization protein ExbD (TC 2.C.1.1.1) (IMGterm)	135	Intracellular trafficking, secretion, and vesicular transport	pfam02472			*
MFLA_2063	protein translocase subunit secG (IMGterm)	111	Intracellular trafficking, secretion, and vesicular transport	pfam03840	TIGR00810		*
MFLA_0484	Hemolysin activator HlyB	572	Intracellular trafficking, secretion, and vesicular transport	pfam03865 pfam08479		*	
MFLA_0483	Adhesin HecA 20-residue repeat x2	1998	Intracellular trafficking, secretion, and vesicular transport	pfam05594 pfam05860	TIGR01731 TIGR01901		*
MFLA_1498	type IV pilus assembly PilZ	123	Intracellular trafficking, secretion, and vesicular transport	pfam07238			
MFLA_1335	methylation	161	Intracellular trafficking, secretion, and vesicular transport	pfam07963	TIGR02532	*	*
MFLA_2717	conserved hypothetical phage-related protein	421	Intracellular trafficking, secretion, and vesicular transport				
MFLA_2520	hypothetical protein	327	Intracellular trafficking, secretion, and vesicular transport			*	
MFLA_2521	hypothetical protein	147	Intracellular trafficking, secretion, and vesicular transport		TIGR02523		*
MFLA_1426	short-chain dehydrogenase/reductase SDR	296	Lipid transport and metabolism	pfam00106			
MFLA_2657	Enoyl-CoA hydratase/isomerase	296	Lipid transport and metabolism	pfam00378			
MFLA_0162	alpha/beta hydrolase fold	321	Lipid transport and metabolism	pfam00561		*	
MFLA_1803	CDP-diacylglycerol--glycerol-3-phosphate 3-phosphatidyltransferase (EC 2.7.8.5) (IMGterm)	188	Lipid transport and metabolism	pfam01066	TIGR00560		*
MFLA_0515	CDP-diacylglycerol--serine O-phosphatidyltransferase (EC 2.7.8.8) (IMGterm)	264	Lipid transport and metabolism	pfam01066	TIGR00473		*
MFLA_1525	phosphatidate cytidyltransferase	276	Lipid transport and metabolism	pfam01148		*	*
MFLA_1526	Undecaprenyl pyrophosphate synthetase (EC 2.5.1.31) (IMGterm)	250	Lipid transport and metabolism	pfam01255	TIGR00055		
MFLA_0468	lyso-ornithine lipid acyltransferase (IMGterm)	259	Lipid transport and metabolism	pfam01553	TIGR00530		
MFLA_0435	acyltransferase 3	679	Lipid transport and metabolism	pfam01757			*

MFLA_0572	phosphatidylglycerophosphatase (EC 3.1.3.27) (IMGterm)	163	Lipid transport and metabolism	pfam04608		*
MFLA_1791	Alpha/beta hydrolase fold-3	281	Lipid transport and metabolism	pfam07859		
MFLA_0746	Alpha/beta hydrolase fold-3	331	Lipid transport and metabolism	pfam07859		
MFLA_2174	putative acyl-CoA dehydrogenase	382	Lipid transport and metabolism	pfam08028		
MFLA_1173	phospholipase D/Transphosphatidylase	450	Lipid transport and metabolism			
MFLA_2383	adenine phosphoribosyltransferase (EC 2.4.2.7) (IMGterm)	176	Nucleotide transport and metabolism	pfam00156	TIGR01090	
MFLA_1280	phosphoribosyltransferase	185	Nucleotide transport and metabolism	pfam00156	TIGR01203	
MFLA_2616	NUDIX hydrolase	146	Nucleotide transport and metabolism	pfam00293	TIGR00586	
MFLA_1166	heat shock protein Hsp20	81	Posttranslational modification, protein turnover, chaperones	pfam00011		
MFLA_1434	cytochrome c oxidase, subunit I	494	Posttranslational modification, protein turnover, chaperones	pfam00115	TIGR00780	*
MFLA_0611	Sulfate ABC transporter, permease protein CysT	279	Posttranslational modification, protein turnover, chaperones	pfam00528	TIGR00969 TIGR02139	*
MFLA_1291	protoheme IX farnesyltransferase	306	Posttranslational modification, protein turnover, chaperones	pfam01040	TIGR01473	*
MFLA_0396	peptidase U32	640	Posttranslational modification, protein turnover, chaperones	pfam01136 pfam12392		
MFLA_0234	cytochrome c assembly protein	381	Posttranslational modification, protein turnover, chaperones	pfam01578	TIGR03144	
MFLA_1765	Urease accessory protein UreF	227	Posttranslational modification, protein turnover, chaperones	pfam01730		*
MFLA_1770	Urease accessory protein UreD	285	Posttranslational modification, protein turnover, chaperones	pfam01774		
MFLA_1983	flagellar protein FliS	152	Posttranslational modification, protein turnover, chaperones	pfam02561	TIGR00208	
MFLA_2175	OsmC-like protein	185	Posttranslational modification, protein turnover, chaperones	pfam02566		
MFLA_2618	protein of unknown function DUF182	334	Posttranslational modification, protein turnover, chaperones	pfam02625		
MFLA_1766	UreE urease accessory-like protein	163	Posttranslational modification, protein turnover, chaperones	pfam02814 pfam05194		
MFLA_0932	Leucyltransferase	244	Posttranslational modification, protein turnover, chaperones	pfam03588	TIGR00667	
MFLA_0931	Arginyltransferase	248	Posttranslational modification, protein turnover, chaperones	pfam04376 pfam04377		
MFLA_1763	HupE/UreJ protein	188	Posttranslational modification, protein turnover, chaperones	pfam04955		* *
MFLA_2246	hypothetical protein	244	Posttranslational modification, protein turnover, chaperones			*

MFLA_0547	hypothetical protein	390	Posttranslational modification, protein turnover, chaperones			*	*
MFLA_1494	Resolvase-like protein	186	Replication, recombination and repair	pfam00239 pfam02796			
MFLA_1155	Recombinase	343	Replication, recombination and repair	pfam00239 pfam07508			
MFLA_0404	putative ATP-dependent DNA helicase-related protein	88	Replication, recombination and repair	pfam00270			
MFLA_0953	ATP-dependent DNA helicase RecQ	611	Replication, recombination and repair	pfam00270 pfam00271 pfam00570 pfam09382	TIGR00614 TIGR01389		
MFLA_0052	ATP-dependent DNA helicase RecG (EC 3.6.1.-) (IMGterm)	686	Replication, recombination and repair	pfam00270 pfam00271 pfam01336	TIGR00643		
MFLA_1327	single-strand binding protein/Primosomal replication protein n	99	Replication, recombination and repair	pfam00436			
MFLA_1147	nuclease (SNase-like)	206	Replication, recombination and repair	pfam00565		*	
MFLA_1202	ATP-dependent DNA helicase Rep (EC 3.6.1.-) (IMGterm)	690	Replication, recombination and repair	pfam00580	TIGR01074		
MFLA_1314	phage integrase	121	Replication, recombination and repair	pfam00589			
MFLA_0198	tyrosine recombinase XerC subunit (IMGterm)	291	Replication, recombination and repair	pfam00589 pfam02899	TIGR02224		
MFLA_1309	Integrase, catalytic region	270	Replication, recombination and repair	pfam00665			
MFLA_2548	Integrase, catalytic region	518	Replication, recombination and repair	pfam00665			
MFLA_1299	DNA-3-methyladenine glycosylase II	142	Replication, recombination and repair	pfam00730			
MFLA_0008	DNA-directed DNA polymerase	385	Replication, recombination and repair	pfam00817 pfam11798 pfam11799			
MFLA_1914	TatD-related deoxyribonuclease	268	Replication, recombination and repair	pfam01026	TIGR00010		
MFLA_1516	RNase HII (EC 3.1.26.4) (IMGterm)	193	Replication, recombination and repair	pfam01351			
MFLA_2547	IstB-like ATP-binding protein	247	Replication, recombination and repair	pfam01695			
MFLA_0477	protein of unknown function DUF1568	232	Replication, recombination and repair	pfam01797			
MFLA_0605	CRISPR-associated exonuclease, Cas4 family (IMGterm)	216	Replication, recombination and repair	pfam01930	TIGR00372		
MFLA_2131	Exodeoxyribonuclease VII small subunit (EC 3.1.11.6) (IMGterm)	85	Replication, recombination and repair	pfam02609	TIGR01280		
MFLA_0315	DNA replication and repair protein RadC (IMGterm)	224	Replication, recombination and repair	pfam04002	TIGR00608		
MFLA_2625		88	Replication, recombination and repair	pfam04002			
MFLA_1266	Radical SAM	360	Replication, recombination and repair	pfam04055			
MFLA_0223	DNA polymerase III, chi subunit (EC	154	Replication, recombination and repair	pfam04364		*	

	2.7.7.7) (IMGterm)					
MFLA_0607	CRISPR-associated protein, Cas2 family (IMGterm)	97	Replication, recombination and repair	pfam09827	TIGR01573	
MFLA_1301	DNA-N1-methyladenine dioxygenase (EC 1.14.11.-) (IMGterm)	241	Replication, recombination and repair		TIGR00568	
MFLA_2624	hypothetical protein	505	Replication, recombination and repair			
MFLA_2401	outer membrane transport energization protein TonB (TC 2.C.1.1.1) (IMGterm)	235	RNA processing and modification		TIGR01352	*
MFLA_1442	fatty acid beta hydroxylase (cytochrome P450)	422	Secondary metabolites biosynthesis, transport and catabolism	pfam00067		
MFLA_1802	short-chain dehydrogenase/reductase SDR	264	Secondary metabolites biosynthesis, transport and catabolism	pfam00106	*	
MFLA_0238	protein of unknown function DUF140	263	Secondary metabolites biosynthesis, transport and catabolism	pfam02405	TIGR00056	
MFLA_1239	Phytanoyl-CoA dioxygenase	295	Secondary metabolites biosynthesis, transport and catabolism	pfam05721		
MFLA_0352	methyl-accepting chemotaxis sensory transducer (IMGterm)	649	Signal transduction mechanisms	pfam00015 pfam02743	*	*
MFLA_0320	protein serine/threonine phosphatases	565	Signal transduction mechanisms	pfam00069 pfam00481		*
MFLA_1736	response regulator receiver domain protein (CheY-like)	134	Signal transduction mechanisms	pfam00072		
MFLA_1282	response regulator receiver domain protein (CheY-like)	164	Signal transduction mechanisms	pfam00072		
MFLA_0531	two component transcriptional regulator, LuxR family (IMGterm)	219	Signal transduction mechanisms	pfam00072 pfam00196		
MFLA_1762	periplasmic sensor hybrid histidine kinase	1146	Signal transduction mechanisms	pfam00072 pfam00512 pfam02518		*
MFLA_0159	transcriptional regulator, LuxR family (IMGterm)	381	Signal transduction mechanisms	pfam00196		
MFLA_1571	adenylate/guanylate cyclase (IMGterm)	426	Signal transduction mechanisms	pfam00211		*
MFLA_2067	phosphohistidine phosphatase, SixA (IMGterm)	150	Signal transduction mechanisms	pfam00300	TIGR00249	
MFLA_0494	FHA domain containing protein	236	Signal transduction mechanisms	pfam00498		
MFLA_2738	periplasmic sensor signal transduction histidine kinase	425	Signal transduction mechanisms	pfam00512 pfam00672 pfam02518	*	*
MFLA_2395	periplasmic sensor signal transduction histidine kinase	686	Signal transduction mechanisms	pfam00512 pfam02518 pfam07695 pfam07696	*	*

MFLA_2449	signal transduction histidine kinase, nitrogen specific, NtrB (EC 2.7.13.3) (IMGterm)	365	Signal transduction mechanisms	pfam00512 pfam02518 pfam08448	TIGR00229		
MFLA_0612	diguanylate phosphodiesterase (EAL domain)	197	Signal transduction mechanisms	pfam00563			
MFLA_0608	putative signaling membrane protein	516	Signal transduction mechanisms	pfam00563		*	
MFLA_2422	diguanylate cyclase/phosphodiesterase (IMGterm)	617	Signal transduction mechanisms	pfam00563 pfam00571 pfam00990	TIGR00254		
MFLA_1388	diguanylate cyclase/phosphodiesterase (IMGterm)	806	Signal transduction mechanisms	pfam00563 pfam00990	TIGR00254		
MFLA_0019	CBS domain containing membrane protein	410	Signal transduction mechanisms	pfam00571 pfam04982			
MFLA_1198	diguanylate cyclase (GGDEF domain)	394	Signal transduction mechanisms	pfam00990	TIGR00254		*
MFLA_0429	diguanylate cyclase (IMGterm)	469	Signal transduction mechanisms	pfam00990	TIGR00254	*	*
MFLA_1232	transcriptional regulators, TraR/DksA family	139	Signal transduction mechanisms	pfam01258	TIGR02420		
MFLA_2589	CheB methyltransferase (IMGterm)	202	Signal transduction mechanisms	pfam01339			
MFLA_1880	transcriptional regulator, BolA protein family (IMGterm)	92	Signal transduction mechanisms	pfam01722			
MFLA_2588	MCP methyltransferase, CheR-type (IMGterm)	286	Signal transduction mechanisms	pfam01739 pfam03705			
MFLA_2201	periplasmic sensor signal transduction histidine kinase	430	Signal transduction mechanisms	pfam02518		*	*
MFLA_0448	putative signal transduction histidine kinase	615	Signal transduction mechanisms	pfam02518 pfam07695		*	*
MFLA_0444	signal transduction histidine kinase, nitrate/nitrite-specific, NarQ (EC 2.7.13.3) (IMGterm)	603	Signal transduction mechanisms	pfam02518 pfam07730		*	*
MFLA_0329	response regulator receiver and ANTAR domain protein (IMGterm)	464	Signal transduction mechanisms	pfam03861 pfam08376			
MFLA_0330	serine/threonine protein kinase (IMGterm)	574	Transcription	pfam00069 pfam07228			*
MFLA_2538	two component transcriptional regulator, winged helix family (IMGterm)	226	Transcription	pfam00072 pfam00486			
MFLA_2202	response regulator receiver domain protein (CheY-like)	183	Transcription	pfam00072 pfam02954			
MFLA_2575	transcriptional regulator, LysR family (IMGterm)	298	Transcription	pfam00126 pfam03466		*	
MFLA_0402	transcriptional regulator, LysR family (IMGterm)	295	Transcription	pfam00126 pfam03466			
MFLA_2570	transcriptional regulator, LysR family	295	Transcription	pfam00126			

	(IMGterm)			pfam03466	
MFLA_2592	transcriptional regulator, LysR family (IMGterm)	299	Transcription	pfam00126 pfam03466	
MFLA_1149	transcriptional regulator, LysR family (IMGterm)	305	Transcription	pfam00126 pfam03466	
MFLA_1790	transcriptional regulator, LysR family (IMGterm)	338	Transcription	pfam00126 pfam03466	
MFLA_0702	RNA polymerase, sigma 32 subunit, RpoH (IMGterm)	285	Transcription	pfam00140 pfam04542 pfam04545	TIGR02392 TIGR02937
MFLA_0899	sigma54 specific transcriptional regulator with GAF sensor, Fis family	632	Transcription	pfam00158 pfam01590 pfam02954	
MFLA_0397	transcriptional regulator, AraC family (IMGterm)	327	Transcription	pfam00165	
MFLA_1180	transcriptional regulator, AraC family (IMGterm)	320	Transcription	pfam00165 pfam01965	
MFLA_2370	transcriptional regulator, AraC family (IMGterm)	275	Transcription	pfam00165 pfam02311	
MFLA_0587	transcriptional regulator, AraC family (IMGterm)	346	Transcription	pfam00165 pfam06719	
MFLA_2409	transcriptional regulator, LuxR family (IMGterm)	272	Transcription	pfam00196	TIGR03020
MFLA_2346	transcriptional regulator, LacI family (IMGterm)	341	Transcription	pfam00356 pfam00532	
MFLA_0693	transcriptional regulator, MerR family (IMGterm)	153	Transcription	pfam00376 pfam09278	TIGR02047
MFLA_0368	transcriptional regulator, TetR family (IMGterm)	184	Transcription	pfam00440	
MFLA_0355	transcriptional regulator, TetR family (IMGterm)	192	Transcription	pfam00440	
MFLA_0170	transcriptional regulator, TetR family (IMGterm)	233	Transcription	pfam00440 pfam09209	
MFLA_0370	transcriptional regulator, ArsR family (IMGterm)	103	Transcription	pfam01022	
MFLA_2359	transcriptional regulator, MarR family (IMGterm)	176	Transcription	pfam01047	
MFLA_1855	transcriptional regulator, CopG family (IMGterm)	156	Transcription	pfam01402 pfam08753	TIGR02793
MFLA_1800	putative transcriptional regulator	128	Transcription	pfam01638	
MFLA_2681	sigma-24 (FecI-like)	179	Transcription	pfam04542 pfam08281	TIGR02937

MFLA_0217	sigma-24 (FecI-like)	196	Transcription	pfam04542 pfam08281	TIGR02937		
MFLA_1353	sigma-24 (FecI-like)	171	Transcription	pfam08281	TIGR02937		
MFLA_2714	hypothetical protein	104	Transcription				
MFLA_0277	translation elongation factor 1A (EF-1A/EF-Tu) (IMGterm)	396	Translation, ribosomal structure and biogenesis	pfam00009 pfam03143 pfam03144	TIGR00231 TIGR00485		
MFLA_2182	RNA methyltransferase TrmH, group 2	154	Translation, ribosomal structure and biogenesis	pfam00588	TIGR00185		
MFLA_1109	Glutamate--tRNA ligase	299	Translation, ribosomal structure and biogenesis	pfam00749			
MFLA_0539	bacterial translation initiation factor 1 (bIF-1) (IMGterm)	88	Translation, ribosomal structure and biogenesis	pfam01176	TIGR00008		
MFLA_1265	heat shock protein Hsp15 (IMGterm)	131	Translation, ribosomal structure and biogenesis	pfam01479		*	
MFLA_2211	SSU ribosomal protein S20P (IMGterm)	87	Translation, ribosomal structure and biogenesis	pfam01649	TIGR00029		
MFLA_0782	23S rRNA Um-2552 2'-O-methyltransferase (EC 2.1.1.-) (IMGterm)	207	Translation, ribosomal structure and biogenesis	pfam01728	TIGR00438		
MFLA_1425	methyltransferase small	321	Translation, ribosomal structure and biogenesis	pfam05175	TIGR00536		
MFLA_1303	putative GNAT-family acetyltransferase	237	Translation, ribosomal structure and biogenesis				
MFLA_0690	von Willebrand factor, type A	326		pfam00092		*	*
MFLA_1898	von Willebrand factor, type A	326		pfam00092			*
MFLA_2749	ATP synthase F0, C subunit	90		pfam00137	TIGR01260		*
MFLA_1349	Hemolysin-type calcium-binding region	744		pfam00353			
MFLA_0301	LSU ribosomal protein L36P (IMGterm)	37		pfam00444	TIGR01022		
MFLA_1288	LSU ribosomal protein L36P (IMGterm)	41		pfam00444	TIGR01022		
MFLA_2761	LSU ribosomal protein L34P (IMGterm)	44		pfam00468	TIGR01030		
MFLA_1906	hypothetical protein	153		pfam00578		*	
MFLA_2716	hypothetical protein	594		pfam00665			
MFLA_2686	hypothetical protein	133		pfam00877			
MFLA_0557	protein of unknown function DUF6, transmembrane	305		pfam00892			*
MFLA_2614	transcriptional regulator, ArsR family (IMGterm)	121		pfam01022			
MFLA_2705	transcriptional regulators, TraR/DksA family	72		pfam01258			
MFLA_2393	protein of unknown function DUF11	1809		pfam01345 pfam05738	TIGR01451	*	*
MFLA_1645	peptidase A24A, prepilin type IV	164		pfam01478			*

MFLA_1488	hypothetical protein	55	pfam01526		
MFLA_0786	phosphoesterase, PA-phosphatase related	179	pfam01569		*
MFLA_2110	protein of unknown function YGGT	191	pfam02325		*
MFLA_2030	Abortive infection protein	225	pfam02517	TIGR03008	*
MFLA_2598	hypothetical protein	137	pfam03203		*
MFLA_2706	bacteriophage lysis protein	194	pfam03245		*
MFLA_0356	protein of unknown function UPF0153	84	pfam03692		
MFLA_2751	ATP synthase protein I	128	pfam03899		*
MFLA_1376	GtrA-like protein	131	pfam04138	*	*
MFLA_2698	hypothetical protein	306	pfam04233		
MFLA_0335	hypothetical protein	67	pfam04328		
MFLA_1338	putative transmembrane protein	183	pfam04350	*	*
MFLA_2677	hypothetical protein	482	pfam04575	*	
MFLA_1126	hypothetical protein	442	pfam04575		
MFLA_1127	hypothetical protein	410	pfam04773	*	
MFLA_2623	VanZ like protein	136	pfam04892		*
MFLA_2417	Fimbrial assembly	179	pfam05137		
MFLA_1943	flagellar transcriptional activator	105	pfam05247		
MFLA_2236	hypothetical protein	138	pfam05258		
MFLA_1942	flagellar transcriptional activator FlhC	182	pfam05280		
MFLA_1982	flagellar protein FlhT	113	pfam05400		
MFLA_0895	hypothetical protein	89	pfam05488		
MFLA_0631	hypothetical protein	56	pfam05545		*
MFLA_1787	Conserved TM helix	494	pfam05552		*
MFLA_1458	hypothetical protein	349	pfam05707		*
MFLA_0831	bacteriophage replication gene A	563	pfam05840		
MFLA_1836	hypothetical protein	151	pfam06146		*
MFLA_2728	protein of unknown function DUF1018	144	pfam06252		
MFLA_0925	hypothetical protein	85	pfam06305	*	*
MFLA_2668	hypothetical protein	78	pfam06474	*	
MFLA_1310	transposase IS3/IS911	102	pfam06627		
MFLA_0865	Antimicrobial peptide resistance and lipid A acylation PagP (IMGterm)	184	pfam07017	*	
MFLA_0947	protein of unknown function DUF1328	55	pfam07043	*	*
MFLA_2398	hypothetical protein	133	pfam07589	TIGR02595	*
MFLA_2005	hypothetical protein	148	pfam07589	TIGR02595	*
MFLA_2006	hypothetical protein	159	pfam07589	TIGR02595	*
MFLA_2397	hypothetical protein	177	pfam07589	TIGR02595 TIGR03370	*
MFLA_2062	hypothetical protein	182	pfam07589	TIGR02595	*
MFLA_0088	hypothetical protein	211	pfam07589	TIGR02595	*

MFLA_2731	hypothetical protein	217	pfam07589	TIGR02595	*	
MFLA_2427	hypothetical protein	231	pfam07589	TIGR02595	*	
MFLA_1122	hypothetical protein	243	pfam07589	TIGR02595	*	*
MFLA_2253	hypothetical protein	248	pfam07589	TIGR02595	*	
MFLA_2408	hypothetical protein	252	pfam07589	TIGR02595	*	
MFLA_1205	hypothetical protein	256	pfam07589	TIGR02595	*	*
MFLA_0709	hypothetical protein	261	pfam07589	TIGR02595	*	
MFLA_1750	hypothetical protein	315	pfam07589	TIGR02595	*	*
MFLA_2396	protein of unknown function DUF1555	166	pfam07589	TIGR02595 TIGR03370	*	
MFLA_1844	protein of unknown function DUF1555	178	pfam07589	TIGR02595	*	
MFLA_1132	protein of unknown function DUF1555	188	pfam07589	TIGR02595	*	*
MFLA_2195	protein of unknown function DUF1555	199	pfam07589	TIGR02595	*	*
MFLA_1602	protein of unknown function DUF1555	205	pfam07589	TIGR02595	*	
MFLA_0151	protein of unknown function DUF1555	214	pfam07589	TIGR02595	*	
MFLA_1601	protein of unknown function DUF1555	218	pfam07589	TIGR02595	*	
MFLA_1718	protein of unknown function DUF1555	226	pfam07589	TIGR02595	*	
MFLA_1203	protein of unknown function DUF1555	242	pfam07589	TIGR02595	*	
MFLA_2194	protein of unknown function DUF1555	243	pfam07589	TIGR02595	*	
MFLA_2279	protein of unknown function DUF1555	253	pfam07589	TIGR02595	*	
MFLA_2756	protein of unknown function DUF1555	338	pfam07589	TIGR02595	*	
MFLA_1598	protein of unknown function DUF1555	263	pfam07589	TIGR02595		
MFLA_1123	hypothetical protein	242	pfam07589 pfam07603	TIGR02595	*	*
MFLA_2310	major facilitator superfamily MFS_1	389	pfam07690		*	*
MFLA_2630	major facilitator superfamily MFS_1	403	pfam07690		*	*
MFLA_2483	major facilitator superfamily MFS_1	411	pfam07690	TIGR00901	*	*
MFLA_2584	protein of unknown function DUF1656	65	pfam07869			*
MFLA_0021	coenzyme PQQ biosynthesis protein A	52	pfam08042	TIGR02107		
MFLA_1719	Sell	60	pfam08238			
MFLA_0443	putative PAS/PAC sensor protein	465	pfam08447	TIGR00229	*	*
MFLA_1270	NDP-hexose 3-C-methyltransferase TylCIII	178	pfam08484			
MFLA_0202	sulfur compound chelating protein SoxZ (IMGterm)	116	pfam08770			
MFLA_2690	hypothetical protein	101	pfam08809			
MFLA_2687	hypothetical protein	180	pfam08875			
MFLA_0854	hypothetical protein	145	pfam08897			
MFLA_2512	hypothetical protein	263	pfam09694	TIGR02001	*	
MFLA_2023	hypothetical protein	295	pfam09721	TIGR02602 TIGR03113		*

MFLA_1776	Glutamine amidotransferase, class-II	124	pfam09723	TIGR02605		
MFLA_2608		120	pfam09994			
MFLA_1312	hypothetical protein	60	pfam10049			
MFLA_0949	hypothetical protein	231	pfam10677		*	
MFLA_0672	hypothetical protein	80	pfam10685		*	
MFLA_1427	hypothetical protein	60	pfam10685			
MFLA_2704	hypothetical protein	111	pfam10805			*
MFLA_1165	hypothetical protein	224	pfam10938			
MFLA_2730	hypothetical protein	80	pfam10982			
MFLA_0706	hypothetical protein	183	pfam10986		*	*
MFLA_2047	hypothetical protein	97	pfam10993			*
MFLA_2378	hypothetical protein	150	pfam11026			*
MFLA_1812	hypothetical protein	62	pfam11127		*	*
MFLA_1156	hypothetical protein	149	pfam11149			
MFLA_0017	hypothetical protein	48	pfam11295			
MFLA_2586	hypothetical protein	64	pfam11450		*	
MFLA_1816	hypothetical protein	168	pfam11454			
MFLA_0366	hypothetical protein	177	pfam11684		*	*
MFLA_1191	hypothetical protein	145	pfam11697			
MFLA_1110	hypothetical protein	108	pfam11743			
MFLA_1414	hypothetical protein	52	pfam11752		*	*
MFLA_0105	hypothetical protein	85	pfam11903			
MFLA_0442	hypothetical protein	347	pfam11927			
MFLA_2466	hypothetical protein	192	pfam11948			
MFLA_2702	hypothetical protein	185	pfam11985			
MFLA_0218	putative transmembrane protein	122	pfam12279			
MFLA_0683	ABC transporter, permease protein, putative	248			*	*
MFLA_1924	acetyltransferase, GNAT family	61				
MFLA_2641	acyl carrier protein	43				
MFLA_1430	copper resistance D	274				*
MFLA_0524	GCN5-related N-acetyltransferase	158				
MFLA_1146	Hemerythrin HHE cation binding region	146				
MFLA_1633	hypothetical protein	64			*	*
MFLA_0328	hypothetical protein	81			*	
MFLA_1461	hypothetical protein	81			*	*
MFLA_1435	hypothetical protein	82			*	*
MFLA_1443	hypothetical protein	87			*	
MFLA_0668	hypothetical protein	88			*	
MFLA_2627	hypothetical protein	93			*	
MFLA_0501	hypothetical protein	94			*	*

MFLA_2593	hypothetical protein	96	*	
MFLA_2670	hypothetical protein	96	*	
MFLA_1420	hypothetical protein	97	*	
MFLA_1901	hypothetical protein	104	*	
MFLA_0135	hypothetical protein	111	*	
MFLA_0375	hypothetical protein	112	*	*
MFLA_0533	hypothetical protein	114	*	*
MFLA_0825	hypothetical protein	116	*	
MFLA_2320	hypothetical protein	117	*	
MFLA_2470	hypothetical protein	118	*	*
MFLA_0822	hypothetical protein	119	*	
MFLA_0933	hypothetical protein	121	*	
MFLA_1187	hypothetical protein	128	*	
MFLA_2178	hypothetical protein	131	*	*
MFLA_1446	hypothetical protein	136	*	*
MFLA_1316	hypothetical protein	143	*	
MFLA_1779	hypothetical protein	148	*	
MFLA_0526	hypothetical protein	157	*	*
MFLA_1903	hypothetical protein	157	*	*
MFLA_0082	hypothetical protein	160	*	
MFLA_2448	hypothetical protein	160	*	
MFLA_2713	hypothetical protein	161	*	
MFLA_1439	hypothetical protein	165	*	*
MFLA_2595	hypothetical protein	169	*	*
MFLA_0710	hypothetical protein	170	*	
MFLA_1374	hypothetical protein	174	*	
MFLA_1337	hypothetical protein	177	*	
MFLA_0691	hypothetical protein	178	*	*
MFLA_1899	hypothetical protein	178	*	*
MFLA_1724	hypothetical protein	181	*	
MFLA_0121	hypothetical protein	189	*	
MFLA_0081	hypothetical protein	204	*	
MFLA_1941	hypothetical protein	212	*	*
MFLA_0367	hypothetical protein	218	*	
MFLA_2399	hypothetical protein	219	*	*
MFLA_0789	hypothetical protein	233	*	
MFLA_1713	hypothetical protein	237	*	*
MFLA_0844	hypothetical protein	245	*	
MFLA_1207	hypothetical protein	245	*	
MFLA_0058	hypothetical protein	249	*	
MFLA_2678	hypothetical protein	259	*	

MFLA_0787	hypothetical protein	277	*	
MFLA_1720	hypothetical protein	277	*	
MFLA_0766	hypothetical protein	298	*	*
MFLA_1897	hypothetical protein	318	*	*
MFLA_1344	hypothetical protein	326	*	
MFLA_0157	hypothetical protein	382	*	
MFLA_1460	hypothetical protein	459	*	*
MFLA_0324	hypothetical protein	472	*	
MFLA_1424	hypothetical protein	497	*	
MFLA_0083	hypothetical protein	501	*	
MFLA_2400	hypothetical protein	551	*	
MFLA_0164	hypothetical protein	35		
MFLA_1609	hypothetical protein	37		
MFLA_0406	hypothetical protein	55		
MFLA_2442	hypothetical protein	62		*
MFLA_2711	hypothetical protein	63		
MFLA_0909	hypothetical protein	68		
MFLA_1157	hypothetical protein	70		
MFLA_1181	hypothetical protein	70		
MFLA_1716	hypothetical protein	72		*
MFLA_2671	hypothetical protein	73		
MFLA_2697	hypothetical protein	76		
MFLA_1440	hypothetical protein	77		
MFLA_1797	hypothetical protein	77		
MFLA_2725	hypothetical protein	77		
MFLA_0536	hypothetical protein	78		
MFLA_0538	hypothetical protein	78		
MFLA_1923	hypothetical protein	78		
MFLA_1167	hypothetical protein	79		
MFLA_1228	hypothetical protein	79		*
MFLA_1311	hypothetical protein	79		*
MFLA_1152	hypothetical protein	80		
MFLA_1608	hypothetical protein	80		
MFLA_0875	hypothetical protein	81		
MFLA_1453	hypothetical protein	81		
MFLA_1841	hypothetical protein	81		*
MFLA_2740	hypothetical protein	81		*
MFLA_0835	hypothetical protein	82		*
MFLA_1629	hypothetical protein	82		
MFLA_0466	hypothetical protein	83		*
MFLA_0660	hypothetical protein	83		

MFLA_0666	hypothetical protein	83	
MFLA_1562	hypothetical protein	83	
MFLA_2177	hypothetical protein	83	
MFLA_1462	hypothetical protein	84	
MFLA_0957	hypothetical protein	85	
MFLA_0747	hypothetical protein	86	
MFLA_0894	hypothetical protein	86	
MFLA_1423	hypothetical protein	86	*
MFLA_2367	hypothetical protein	87	
MFLA_1463	hypothetical protein	88	
MFLA_2712	hypothetical protein	88	
MFLA_2722	hypothetical protein	89	
MFLA_1300	hypothetical protein	90	
MFLA_0826	hypothetical protein	92	*
MFLA_0934	hypothetical protein	93	*
MFLA_1415	hypothetical protein	93	
MFLA_1627	hypothetical protein	93	
MFLA_2718	hypothetical protein	93	
MFLA_0176	hypothetical protein	94	
MFLA_0832	hypothetical protein	94	
MFLA_2200	hypothetical protein	94	
MFLA_0460	hypothetical protein	97	
MFLA_0613	hypothetical protein	97	
MFLA_2727	hypothetical protein	97	*
MFLA_2127	hypothetical protein	98	
MFLA_1211	hypothetical protein	100	*
MFLA_2703	hypothetical protein	102	
MFLA_2719	hypothetical protein	102	*
MFLA_0337	hypothetical protein	103	
MFLA_0395	hypothetical protein	104	*
MFLA_1121	hypothetical protein	104	
MFLA_0207	hypothetical protein	105	
MFLA_0830	hypothetical protein	106	
MFLA_2224	hypothetical protein	106	
MFLA_2515	hypothetical protein	106	
MFLA_2735	hypothetical protein	106	
MFLA_1190	hypothetical protein	108	
MFLA_1459	hypothetical protein	108	*
MFLA_2565	hypothetical protein	108	
MFLA_1827	hypothetical protein	113	*
MFLA_2691	hypothetical protein	113	

MFLA_2180	hypothetical protein	114	*
MFLA_0464	hypothetical protein	115	
MFLA_1595	hypothetical protein	115	
MFLA_0481	hypothetical protein	116	
MFLA_0216	hypothetical protein	117	
MFLA_2555	hypothetical protein	119	
MFLA_0711	hypothetical protein	120	
MFLA_2070	hypothetical protein	122	*
MFLA_0566	hypothetical protein	123	
MFLA_1366	hypothetical protein	123	*
MFLA_0564	hypothetical protein	124	
MFLA_2078	hypothetical protein	125	
MFLA_2165	hypothetical protein	128	*
MFLA_2613	hypothetical protein	128	
MFLA_2723	hypothetical protein	128	
MFLA_0407	hypothetical protein	130	
MFLA_0820	hypothetical protein	130	*
MFLA_2084	hypothetical protein	130	
MFLA_1818	hypothetical protein	133	
MFLA_2688	hypothetical protein	133	
MFLA_2649	hypothetical protein	134	
MFLA_2569	hypothetical protein	139	*
MFLA_1537	hypothetical protein	141	TIGR02246
MFLA_2726	hypothetical protein	141	
MFLA_0534	hypothetical protein	142	
MFLA_0014	hypothetical protein	144	
MFLA_1151	hypothetical protein	147	
MFLA_0781	hypothetical protein	151	*
MFLA_0824	hypothetical protein	154	
MFLA_0398	hypothetical protein	155	*
MFLA_0553	hypothetical protein	158	
MFLA_2693	hypothetical protein	161	
MFLA_0829	hypothetical protein	162	
MFLA_1290	hypothetical protein	163	*
MFLA_2694	hypothetical protein	165	
MFLA_2720	hypothetical protein	168	
MFLA_1178	hypothetical protein	169	
MFLA_1396	hypothetical protein	169	
MFLA_1741	hypothetical protein	169	
MFLA_1339	hypothetical protein	174	*
MFLA_0376	hypothetical protein	181	

MFLA_0828	hypothetical protein	185		
MFLA_1431	hypothetical protein	186		*
MFLA_2245	hypothetical protein	189		
MFLA_2416	hypothetical protein	197		*
MFLA_0440	hypothetical protein	199		
MFLA_0823	hypothetical protein	199		
MFLA_1740	hypothetical protein	205		
MFLA_2683	hypothetical protein	205		
MFLA_0767	hypothetical protein	208		*
MFLA_1756	hypothetical protein	208		
MFLA_1778	hypothetical protein	216		
MFLA_2597	hypothetical protein	217		
MFLA_2695	hypothetical protein	219		
MFLA_2684	hypothetical protein	225		
MFLA_2692	hypothetical protein	253		
MFLA_2418	hypothetical protein	255		
MFLA_0362	hypothetical protein	260		*
MFLA_0308	hypothetical protein	262		
MFLA_0473	hypothetical protein	267		*
MFLA_0827	hypothetical protein	268		
MFLA_1340	hypothetical protein	285		
MFLA_0765	hypothetical protein	289		
MFLA_1456	hypothetical protein	290		
MFLA_0090	hypothetical protein	303		
MFLA_2715	hypothetical protein	323		
MFLA_2549	hypothetical protein	351		
MFLA_2700	hypothetical protein	478		
MFLA_0671	hypothetical protein	492		
MFLA_2699	hypothetical protein	514		
MFLA_0595	hypothetical protein	580		*
MFLA_0104	hypothetical protein	597		
MFLA_1860	hypothetical protein	621		*
MFLA_0840	Lip	73	*	
MFLA_0616	major membrane protein I	305		
MFLA_0689	MxaA protein, putative	301	*	*
MFLA_0656	osmotically inducible lipoprotein	70	*	*
MFLA_2596	proline-rich region	178	*	
MFLA_1154	prophage LambdaMc01, site-specific recombinase, resolvase family	104		
MFLA_1313	putative integrase	172		
MFLA_2166	putative lipoprotein	482	*	

MFLA_0158	putative N,N-dimethylformamidase	777		
MFLA_2415	putative prolin-rich transmembrane protein	200	*	
MFLA_0655	putative signal transduction protein with EFhand domain	184	*	
MFLA_0480	putative transmembrane protein	129	*	*
MFLA_0478	putative transmembrane protein	119		
MFLA_0479	putative transmembrane protein	120		*
MFLA_0077	TPR repeat	390		
MFLA_1730	transcriptional regulator (IMGterm)	61		
MFLA_0963	tRNA/rRNA methyltransferase (SpoU)	53		
MFLA_1758	uracil-DNA glycosylase	299		
MFLA_1900	von Willebrand factor, type A	321	*	*
MFLA_1782		130		
MFLA_0405		170		