



1365210_7	No roles mapped of 0 KOs	Protein export, secretion, and sorting	3-oxoacyl-ACP reductase FabG	7944448796	4.83E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
1377780_5	Intracellular trafficking, assembly, and processing	Protein export, secretion, and sorting	Protein translocase subunit SecE	5108732204	5.00E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
155193_3	Defense and invasion systems	Detoxification and inactivation	Peroxisidase	793037669	1.13E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
120200_3	Defense and invasion systems	Detoxification and inactivation	Catalase	792605658	3.76E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
154247_4	No roles mapped of 0 KOs		Citrate synthase	792934956	1.24E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
136661_4	Carbohydrate metabolism	Citrate cycle (TCA cycle)	Citrate synthase	792934956	1.25E-06	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
122820_9	Transport and binding proteins	Cations and ion carrying compounds	Iron transporter ynfM	7910434316	8.64E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
115175_5	Transport and binding proteins	Cell structure, growth, and death	Iron-sulfur S-adenosylmethionine (SAM) family, citrate/isocitrate lyase	7910314316	9.82E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
34567_4	Translation	Translation factors	Elongation factor Tu	7903818695	1.50E-06	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
945075_1	Translation	Ribosomal proteins: synthesis and modification	16S ribosomal protein L12	7911671125	6.70E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
480346_4	Translation	Ribosomal proteins: synthesis and modification	50S ribosomal protein L19	7988312045	3.83E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
54590_2	Energy metabolism	Oxidative phosphorylation	Cytochrome c oxidase_cbb3_type subunit II	788573449	4.88E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
167770_3	Translation	Ribosomal proteins: synthesis and modification	Transfer B biogenesis	788442424	3.64E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
96070_6	Energy metabolism	Oxidative phosphorylation	Threonine--cysA ligase	7866608398	1.17E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
94508_7	No roles mapped of 0 KOs		Nif_in_Unref	788442424	4.29E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Nif_in_Unref	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
138951_1	Fatty acid and lipid metabolism	Biohydrogen	3-oxoacyl-(acyl carrier)-protein synthase 3	783977275	6.04E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
141912_4	Translation	Ribosomal proteins: synthesis and modification	GTPase Drp	782328704	4.51E-06	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
154889_2	Amino acid metabolism	Phenylalanine, tyrosine and tryptophan biosynthesis	Glutamine amidotransferase, class I	781904968	9.26E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
71984_6	Energy metabolism	Oxidative phosphorylation	Cbb3-type cytochrome c oxidase subunit	781878274	3.28E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
168175_1	Nucleic acid metabolism	DNA replication, recombination, and repair	Superoxide dismutase	781293068	1.11E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
68175_1	Intracellular trafficking, assembly, and processing	Oxidation and folding catalysis	Disulfide isomerase	780981075	6.83E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
10675_1	Translation	Translation factors	DNA-directed RNA polymerase subunit beta	780142825	4.05E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
79437_7	Translation	Ribosomal proteins: synthesis and modification	30S ribosomal protein S9	799948899	2.45E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
71764_7	Translation	Ribosomal proteins: synthesis and modification	50S ribosomal protein L12	7990234181	1.64E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
168388_1	Amino acid metabolism	Alanine, aspartate and glutamate metabolism	aspartate/tyrosine/serine amidotransferase	7788366975	3.57E-06	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
145187_4	Transport and binding proteins	Nucleosides, purines and pyrimidines	Putative hydroxymeripyrinidase translocase CpxK	778545447	7.78E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
137921_4	Transport and binding proteins	Carbohydrates, organic alcohols, and acids	MSP transporter	776978791	3.82E-12	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
34567_2	Translation	Translation factors	Elongation factor G	777470797	4.62E-06	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
120472_1	No roles mapped of 0 KOs		Uncharacterized protein	774991556	2.77E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
62795_8	Translation	Ribosomal proteins: synthesis and modification	50S ribosomal protein L31	757388235	3.44E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
13884_1	Nucleic acid metabolism	Purine metabolism	Catabolism-ympH-like protein large chain	776393464	2.39E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
13884_1	No roles mapped of 0 KOs		Metal-dependent phosphatase, phosphodiesterase/enolase	776393260	3.86E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
31418_1	Fatty acid and lipid metabolism	Biohydrogen	acyl-CoA desaturase	775522402	4.08E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
34567_1	Translation	Ribosomal proteins: synthesis and modification	16S ribosomal protein S7	774532877	1.81E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
148011_1	No roles mapped of 0 KOs		Uncharacterized protein	774532876	1.04E-06	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
157659_6	Regulatory functions	DNA interactions	MetF uracil regulation protein	774547074	3.96E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
14872_4	Translation	ORF base modification	anti-sense specific RNA methyltransferase RlmM	774545208	2.45E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
97422_2	No roles mapped of 0 KOs		DNA topoisomerase III	774167489	1.06E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
165701_2	Transport and binding proteins	Carbohydrates, organic alcohols, and acids	MSP domain-containing protein	773888861	1.86E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
179512_1	Amino acid metabolism	Alanine, aspartate and glutamate metabolism	Hydroxy methylglutaryl-CoA synthase	773851212	2.45E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
400358_1	Amino acid metabolism	Valine, leucine and isoleucine metabolism	Acetyl-CoA synthase	771531082	1.53E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
93408_1	Translation	Translation factors	Initiation factor 2	770859959	4.74E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
93284_2	Amino acid metabolism	Histidine metabolism	Acetolactate synthase	770315432	3.47E-16	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
174970_4	Translation	Transcription factors	Transcription termination/antitermination protein Nts	770283486	3.54E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
180351_1	Glycan biosynthesis and metabolism	Carbohydrates and glycosylation	Arabinose 5-epimerase	768251261	1.62E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
19922_2	No roles mapped of 1 KOs		Cyanuric acid lyase	768169119	7.04E-06	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
96262_1	Energy metabolism	Oxidative phosphorylation	Cytochrome c oxidase subunit 2 (Fragment)	767992929	1.05E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
174548_1	Energy metabolism	Transfer B biogenesis	Threonine--cysA ligase	767727747	1.65E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
154889_1	Energy metabolism	Oxidative phosphorylation	Succinate dehydrogenase flavoprotein subunit c	766702912	1.30E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
10087_3	No roles mapped of 0 KOs		Nif_in_Unref	766503256	1.54E-10	Getamipin_ErnicheRelatatio_OtherSubstrates	Nif_in_Unref	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
20095_2	Energy metabolism	Oxidative phosphorylation	NADH:quinone oxidoreductase subunit E	766503256	6.78E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
20088_2	Transport and binding proteins	Carbohydrates, organic alcohols, and acids	Bmp domain-containing protein	766051341	2.55E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
125575_1	Carbohydrate metabolism	Citrate cycle (TCA cycle)	Isocitrate dehydrogenase (NADP)	764612892	1.75E-11	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
176009_22	Carbohydrate metabolism	Citrate cycle (TCA cycle)	Isocitrate dehydrogenase (NADP)	764402055	6.64E-06	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
151760_3	Translation	Ribosomal proteins: synthesis and modification	30S ribosomal protein S6	763592494	7.74E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
99769_2	Metabolism of other amino acids and amines	Glyoxylate shunt and anaplerotic reactions	Glyoxylate shunt	763575522	2.69E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
47441_2	Cell motility and adherence	Surface structures and assembly	Type IV pilus biogenesis protein PilQ	763135058	5.77E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
115641_2	Carbohydrate metabolism	Citrate cycle (TCA cycle)	Glutamate dehydrogenase	762993282	2.45E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
115641_2	Translation	Translation factors	DNA-directed RNA polymerase subunit alpha	762946743	5.37E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
150137_1	Energy metabolism	Oxidative phosphorylation	ATP synthase subunit beta	762709722	1.78E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
127007_1	Translation	Ribosomal proteins: synthesis and modification	30S ribosomal protein S4	761972495	3.05E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
161570_3	Amino acid metabolism	Valine, leucine and isoleucine metabolism	Succinyl-CoA:3-oxoacid coenzyme A transferase sub	761862565	8.49E-06	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
52728_2	Intracellular trafficking, assembly, and processing	Protein export, secretion, and sorting	Translocase subunit SecE	761621046	1.26E-06	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
104240_3	Translation	Translation factors	Elongation factor Tu	761403765	3.49E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
362340_18	Intracellular trafficking, assembly, and processing	Chaperone and folding catalysis	60 kDa chaperonin	761201901	1.63E-04	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
94382_1	Cell motility and adherence	Surface structures and assembly	Flagella core and associated proteins	719948004	1.23E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
438208_4	No roles mapped of 0 KOs		Nif_in_Unref	759662003	1.63E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Nif_in_Unref	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
1162459_3	Energy metabolism	Oxidative phosphorylation	Cytochrome c ubiquinol oxidase subunit I	759647048	5.97E-08	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
117273_7	No roles mapped of 0 KOs		Uncharacterized protein (Fragment)	759613978	5.87E-06	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
115184_9	Translation	Ribosomal proteins: synthesis and modification	50S ribosomal protein L5	757461875	1.39E-13	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
15295_6	No roles mapped of 0 KOs		Uncharacterized protein	757283365	3.96E-13	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
951276_5	No roles mapped of 0 KOs		Alpha 1 domain-containing protein	757484715	6.83E-07	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
508975_1	Energy metabolism	Oxidative phosphorylation	Cytochrome c ubiquinol oxidase subunit I	756691309	1.63E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
185414_4	Energy metabolism	Oxidative phosphorylation	Cytochrome c ubiquinol oxidase subunit I	756691309	1.95E-11	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
29386_5	No roles mapped of 0 KOs		RM domain-containing protein	755832025	5.12E-05	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia	Comamonas	Varioxax
400845_4	Amino acid metabolism	Valine, leucine and isoleucine metabolism	Ketol-acid reductoisomerase (NADPH+)	755975044	8.08E-06	Getamipin_ErnicheRelatatio_OtherSubstrates	Bacteria	Proteobacter	Betaproteobacteria	Burkholderia</		









494843_4	Translation	Ribosomal proteins: synthesis and modification	30S ribosomal protein S9	1.21500077	G013609113	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae	Ohtaekawa	Ohtaekawia	Ohtaekawia	Korosis
1612786_1	Translation	Transfer & biogenesis	RNAi RNAi ligase	1.215341019	G013822026	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae		Cytophaga	Cytophaga	flava
19390_3	Nucleic acid metabolism	Pyrimidine	CTP synthase	1.215005809	G012721799	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes							Bacteroidetes bacterium ADuB18425
1304266_6	Transcription	ADP-dependent RNA helicase DfpA	ADP-dependent RNA helicase DfpA	1.214062632	G013030727	Getaphium	Enriched/Relative	OtherSubstrates	No taxonomic annotation available								
931061_47	Energy metabolism	Oxidative phosphorylation	Oxidative phosphorylation	1.18881398	G003317668	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria								
10428310	Transport and binding proteins	Amino acids, peptides and amines	High-affinity choline transporter protein	1.213576505	G010000814	Getaphium	Enriched/Relative	OtherSubstrates	No taxonomic annotation available								
414971_1	No roles mapped out of 6 OKs	Uncharacterized protein	Uncharacterized protein	1.213574073	G010000811	Getaphium	Enriched/Relative	OtherSubstrates	No taxonomic annotation available								
212529_2	Prosthetic groups, cofactors, and carriers	Coenzyme M	Phosphate coenzyme A synthase	1.219552504	G010942584	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Actinobacteria	Chloroflexi	Nitrospirillum	Nitrospirillum	Nitrospirillum	Nitrospirillum	Candidatus Nitrospirillum gagensis	
367244_4	Translation	Ribosomal proteins: synthesis and modification	50S ribosomal protein L4	1.21284832	G012031279	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae	Ohtaekawa	Ohtaekawia	Korosis	
1184045_3	No roles mapped out of 9 OKs	Uncharacterized protein	Uncharacterized protein	1.214277383	G010559162	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				Thaumarchaeota bacterium 9512
122773_2	Translation	Ribosomal proteins: synthesis and modification	30S ribosomal protein L1	1.211476759	G010780669	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes							Bacteroidetes bacterium
1110055_5	Intracellular trafficking, assembly, and processing	Chaperone and folding catalyst	Chaperone protein DnaK	1.211212965	G010904953	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes							Bacteroidetes bacterium
142021_1	Nucleic acid metabolism	Replication, recombination, and repair	DNA-dependent RNA polymerase	1.212021193	G012451122	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Actinobacteria	Gemmatimonadetes	Pseudomonas	Pseudomonas	Pseudomonadaceae		Bacteroidetes bacterium
1668731_4	Translation	Ribosomal proteins: synthesis and modification	30S ribosomal protein S12	1.21071133	G012479221	Getaphium	Enriched/Relative	OtherSubstrates	No taxonomic annotation available								
206576_9	Carbohydrate metabolism	Ribonucleotide biosynthesis	Dihydroxydiphenylacetate synthase	1.208402761	G010002776	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Actinobacteria	Actinobacteria	Actinobacteriales	Actinobacteria	Actinobacteria	Actinobacteria	Actinobacteria	Bacteria
110427_46	Transport and binding proteins	Proton-coupled co-receptor	Proton-coupled co-receptor	1.208402759	G010002775	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Actinobacteria	Actinobacteriales	Actinobacteria	Actinobacteria	Actinobacteria	Actinobacteria	Actinobacteria
1513701_4	Translation	Ribosomal proteins: synthesis and modification	50S ribosomal protein S10	1.208182628	G010967128	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae	Ohtaekawa	Ohtaekawia	Korosis	
897925_3	Intracellular trafficking, assembly, and processing	Intracellular trafficking, assembly, and processing	Acetyltransferase 1	1.207852286	G010498282	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae	Ohtaekawa	Ohtaekawia	Korosis	
151144_3	Carbohydrate metabolism	Pyruvate metabolism	Acetyltransferase component of pyruvate dehydrogenase	1.208149397	G010304103	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae	Ohtaekawa	Ohtaekawia	Korosis	
14722_2	Transcription	Ribosomal proteins: synthesis and modification	RNA-binding transcriptional activator protein	1.207871954	G010808995	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Chloroflexi	Chloroflexii	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales
299401_3	Transcription	Ribosomal proteins: synthesis and modification	50S ribosomal protein L4	1.207633008	G010426189	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Actinobacteria	Actinobacteriales	Actinobacteria	Actinobacteria	Actinobacteria	Actinobacteria	Actinobacteria
324943_1	No roles mapped out of 9 OKs	Ribosomal proteins: synthesis and modification	30S ribosomal protein S9	1.207610808	G010426189	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Actinobacteria	Actinobacteriales	Actinobacteria	Actinobacteria	Actinobacteria	Actinobacteria	Actinobacteria
951992_1	Translation	Prosthetic groups, cofactors, and carriers	Phylogenetic protein P2	1.207616875	G010426189	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Chloroflexi	Chloroflexii	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales
1913185_2	Prosthetic groups, cofactors, and carriers	Ribosomal proteins: synthesis and modification	Ribosomal protein P0	1.207616875	G010426189	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Chloroflexi	Chloroflexii	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales
897198_1	No roles mapped out of 1 OKs	Chaperone and folding catalyst	Carboxin carbonation factor X	1.207648643	G010393795	Getaphium	Enriched/Relative	OtherSubstrates	No taxonomic annotation available								
1154207_22	Intracellular trafficking, assembly, and processing	Chaperone and folding catalyst	NADPH-dependent oxidoreductase	1.207648643	G010393795	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Chloroflexi	Chloroflexii	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales
189031_6	Amino acid metabolism	Glycine, serine and threonine metabolism	NAD/NADP-dependent betaine aldehyde dehydrogenase	1.205744149	G012244064	Getaphium	Enriched/Relative	OtherSubstrates	No taxonomic annotation available								
1411369_2	Carbohydrate metabolism	Alanine, aspartate and glutamate metabolism	Transketolase	1.205440997	G013697179	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Cyanobacteria	Nitrospirillum	Nitrospirillum	Nitrospirillum	Nitrospirillum	Nitrospirillum	Nitrospirillum	Nitrospirillum
297963_1	Transcription	Prosthetic groups, cofactors, and carriers	NAD(P)-dependent alcohol dehydrogenase	1.205410214	G013697179	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Actinobacteria	Actinobacteriales	Actinobacteria	Actinobacteria	Actinobacteria	Actinobacteria	Actinobacteria
1624440_2	Amino acid metabolism	Alanine, aspartate and glutamate metabolism	Glyoxylate oxidase-like protein	1.204140929	G01251108	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				
1044630_3	Cell structure, growth, and death	Cell division	Cell division protein FtsZ	1.204206313	G012077208	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Gammaproteobacteria	Pseudomonas	Pseudomonas	Pseudomonas	Pseudomonas	Pseudomonas	Pseudomonas
1046661_11	Transcription	Ribosomal proteins: synthesis and modification	50S ribosomal protein L1	1.204206313	G012077208	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Gammaproteobacteria	Pseudomonas	Pseudomonas	Pseudomonas	Pseudomonas	Pseudomonas	Pseudomonas
1047876_3	Cell structure, growth, and death	Proton-ATPase	DnaJ 2807 domain-containing protein	1.201116096	G010113362	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				Flavobacterium caeni
1420096_9	Amino acid metabolism	Chaperone and folding catalyst	Protein disulfide isomerase	1.201116096	G010113362	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				Cytophaga
601348_5	Intracellular trafficking, assembly, and processing	Protein modification and repair	Apoptosis inhibitor 1	1.204935468	G010251471	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes							Bacteroidetes bacterium ADuB18097
109728_9	Transcription	Transcription factors	Elongation factor G	1.202440441	G010676025	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes							Bacteroidetes bacterium
92436_4	No roles mapped out of 4 OKs	Transcription factors	Longing endonuclease (Fragment)	1.202687055	G010676025	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes							
549790_7	Intracellular trafficking, assembly, and processing	Chaperone and folding catalyst	60 kDa chaperonin	1.201035842	G010387243	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes							
1042745_18	Transcription	Ribosomal proteins: synthesis and modification	Ribosomal protein L11A	1.200741725	G010236762	Getaphium	Enriched/Relative	OtherSubstrates	No taxonomic annotation available								
1448820_10	Glycan biosynthesis and metabolism	UDP-N-acetylglucosamine glycosylase	UDP-N-acetylglucosamine glycosylase	1.200814225	G010486287	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				Cytophaga
1139099_4	Energy metabolism	ADP-dependent phosphorylation	ATP synthase subunit beta	1.196223586	G010451338	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes							
127812_2	Transcription	ADP-dependent phosphorylation	RNA-directed RNA polymerase subunit beta'	1.192578007	G010451338	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes							
106850_16	Amino acid metabolism	Histidine metabolism	Formin-nucleation domain	1.198112623	G012617106	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Gammaproteobacteria	Pseudomonas	Pseudomonas	Pseudomonadaceae			Bacteroidetes bacterium
104022_3	Amino acid metabolism	Valine, leucine and isoleucine metabolism	Threonine dehydratase	1.197811766	G010473194	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				
160023_1	Energy metabolism	Glycolysis	RNA-directed RNA polymerase subunit beta'	1.197238114	G012617106	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				
160208_2	Transcription	Chaperone and folding catalyst	DNA-directed RNA polymerase subunit beta'	1.197238114	G012617106	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				
43384_8	Intracellular trafficking, assembly, and processing	Chaperone and folding catalyst	Chaperone protein Hsp70	1.197473615	G010808304	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				
100213_3	Unknown function	ATPase	ATPase	1.196393134	G010209194	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Firmicutes	Clostridia	Clostridiales	Petropaccoc	Candidatus	Candidatus	Desulfohalobium sp.
1043116_3	Signal transduction	Two-component systems	Phosphate regulator sensor protein PflK	1.198221379	G010209194	Getaphium	Enriched/Relative	OtherSubstrates	No taxonomic annotation available								
427466_2	Energy metabolism	Pyruvate metabolism	RNA-directed RNA polymerase subunit beta'	1.201525959	G010387243	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				Cytophaga flava
24096_3	No roles mapped out of 4 OKs	Transcription factors	DF1457 domain-containing protein	1.19757242	G010403958	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae	Spimosina	Spimosina	sp. ICTC 42546	
360717_17	Nucleic acid metabolism	Replication, recombination, and repair	DnaC	1.195493605	G010486287	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae	Spimosina	Spimosina	sp. ICTC 42546	
551409_1	No roles mapped out of 4 OKs	Ribosomal proteins: synthesis and modification	50S ribosomal protein L2	1.195118259	G010393795	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				Cytophaga flava
1711813_9	Translation	Ribosomal proteins: synthesis and modification	50S ribosomal protein L4	1.195290717	G010393795	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae	Ohtaekawa	Ohtaekawia	Korosis	
897176_1	Translation	Ribosomal proteins: synthesis and modification	30S ribosomal protein S8	1.195178839	G010122480	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Chloroflexi	Chloroflexii	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales
1172805_6	Prosthetic groups, cofactors, and carriers	Ribosomal proteins: synthesis and modification	50S ribosomal protein L2	1.195178839	G010122480	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Chloroflexi	Chloroflexii	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales
131882_1	Translation	Ribosomal proteins: synthesis and modification	30S ribosomal protein S1	1.194437335	G010302803	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes							Bacteroidetes bacterium
106529_24	Energy metabolism	Oxidative phosphorylation	ATP synthase subunit beta	1.193254969	G010302803	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes							Bacteroidetes bacterium
1114640_4	Nucleic acid metabolism	Purine metabolism	ATP synthase subunit beta	1.193254969	G010302803	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes							Bacteroidetes bacterium
61774_10	Defense and invasion systems	Defensin and inactivation	Allyl hydroxylase reductase subunit C11e protein	1.192446946	G010393795	Getaphium	Enriched/Relative	OtherSubstrates	No taxonomic annotation available								
187525_1	Nucleic acid metabolism	Purine metabolism	5-Phosphoribosylglycine synthase	1.192320031	G010393795	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Gammaproteobacteria	Pseudomonas	Pseudomonas	Pseudomonas	Pseudomonas	Pseudomonas	Pseudomonas
1858030_4	Energy metabolism	ADP-dependent phosphorylation	ATP synthase gamma chain	1.191799223	G010393795	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae	Ohtaekawa	Ohtaekawia	Korosis	
296331_8	Fatty acid and lipid metabolism	Biohydrogen	3-hydroxyacyl-CoA synthase	1.191641221	G010008046	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				
62585_14	Amino acid metabolism	Phenylalanine, tyrosine and tryptophan biosynthesis	Phenylalanine hydroxylase	1.191641221	G010008046	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				Cytophaga
191887_14	Intracellular trafficking, assembly, and processing	Chaperone and folding catalyst	60 kDa chaperonin	1.190977934	G010409524	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				Cytophaga
724616_9	No roles mapped out of 5 OKs	Chaperone and folding catalyst	Uncharacterized protein	1.190964021	G010409524	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				Cytophaga
148807_3	No roles mapped out of 1 OKs	Transport and binding proteins	MuA-like ATPase	1.190231449	G010436459	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Gammaproteobacteria	Pseudomonas	Pseudomonadaceae				Pseudomonas
123957_2	Transport and binding proteins	Chaperone and folding catalyst	DF1520 domain-containing protein	1.190544091	G010741704	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae	Ohtaekawa	Ohtaekawia	Korosis	
74278_4	Nucleic acid metabolism	Replication, recombination, and repair	Topo IV A subunit (topoisomerase)	1.189777968	G010483283	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Chloroflexi	Chloroflexii	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales	Chloroflexiales
141412_7	Translation	Transcription factors	Elongation factor Tu	1.18938041	G010614958	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Cytophaga	Cytophagii	Cytophagae				Cytophaga flava
1819925_2	No roles mapped out of 9 OKs	Secreted factors	Serine/threonine protein kinase	1.189524721	G010486287	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Gammaproteobacteria	Neisseriales	Sinobacter	Sinobacter	Sinobacter	Sinobacter	Sinobacter
107085_12	Defense and invasion systems	Phage and phage-like	Phage and phage-like protein CstC	1.189888881	G010614958	Getaphium	Enriched/Relative	OtherSubstrates	Bacteria	Bacteroidetes	Actinobacteria	Actinobacteriales					





