

Table S1. Proteins identified by LC-MS from cultures of *B. ambifaria* T16 grown in M9 minimal medium with sodium citrate (M9+CA) or fusaric acid (M9+FA) as sole carbon source.

The sign + indicates significant differences in protein abundance between the two cultivation conditions

| Protein ID | Predicted function | Log2LFQ(FA-CA) | Student's T-test |
|----------------------------------|---|----------------|------------------|
| NHL70922.1 | LLIM class flavin-dependent oxidoreductase | 10.8779 | + |
| NHL70923.1 | enoyl-CoA hydratase | 9.99548 | + |
| NHL70917.1 | 3,4-dihydroxy-2-butane-4-phosphate synthase | 8.95027 | + |
| NHL70920.1 | enoyl-CoA hydratase/isomerase family protein | 8.94157 | + |
| NHL70924.1 | AMP-binding protein | 8.89944 | + |
| NHL70914.1 | dihydrolipoyllysine-residue acetyltransferase | 7.88209 | + |
| NHL70913.1 | alpha-ketoglutarate dehydrogenase | 7.767605 | + |
| NHL70918.1 | acyl-CoA synthetase | 7.54677 | + |
| NHL70921.1 | creatininase family protein | 7.22397 | + |
| NHL70094.1 | CoA transferase | 7.20016 | + |
| NHL65703.1 | formate dehydrogenase subunit alpha | 6.65666 | + |
| NHL70916.1 | Lrp/AsnC family transcriptional regulator | 6.24661 | + |
| NHL69612.1 | acyl-CoA dehydrogenase | 6.17527 | + |
| NHL70098.1 | methylisocitrate lyase PrpB | 6.05959 | + |
| NHL70095.1 | 2-methylaconitate cis-trans isomerase PrpF | 5.86579 | + |
| NHL70097.1 | 2-methylcitrate synthase PrpC | 5.72597 | + |
| NHL70239.1 | AMP-binding protein | 5.56256 | + |
| NHL70096.1 | Fe/S-dependent 2-methylisocitrate dehydratase AcnD | 5.38894 | + |
| NHL65705.1 | formate dehydrogenase | 5.32041 | + |
| NHL70420.1 | 3-hydroxyacyl-CoA dehydrogenase | 5.21292 | + |
| NHL69608.1 | enoyl-CoA hydratase | 5.11912 | + |
| NHL70226.1 | acyl-CoA dehydrogenase | 5.0336 | + |
| NHL69611.1 | AMP-binding protein | 4.98733 | + |
| NHL69181.1 | MEKHLA domain-containing protein | 4.97697 | + |
| NHL65704.1 | formate dehydrogenase | 4.93761 | |
| NHL70421.1 | AMP-binding protein | 4.91595 | + |
| NHL71193.1 | 3-hydroxybutyryl-CoA dehydrogenase | 4.85804 | + |
| NHL71194.1 | acyl-CoA C-acyltransferase family protein | 4.6218 | + |
| NHL68896.1 | acyl-CoA synthetase | 4.4809 | + |
| NHL70908.1 | DUF4148 domain-containing protein | 4.29526 | + |
| NHL70419.1 | acyl-CoA C-acyltransferase | 4.17029 | + |
| NHL66293.1 | amino acid adenylation domain-containing protein | 4.05543 | |
| NHL67411.1 | CHRD domain-containing protein | 4.02644 | |
| NHL69609.1 | 3-hydroxyisobutyrate dehydrogenase | 3.93346 | + |
| NHL68402.1 | dehydrogenase | 3.79089 | + |
| NHL71102.1 | tryptophan-tRNA ligase | 3.65071 | + |
| NHL69610.1 | CoA-acylating methylmalonate-semialdehyde dehydrogenase | 3.5291 | + |
| NHL66071.1 | NUDIX domain-containing protein | 3.49351 | |
| NHL67339.1 | glycerol kinase GlpK | 3.36444 | + |
| NHL65032.1 | 4-hydroxyphenylpyruvate dioxygenase | 3.25747 | + |
| NHL66022.1 | porin | 3.20126 | + |
| NHL66109.1 | LysR family transcriptional regulator | 3.16789 | + |
| NHL70225.1;NHL71195.1;NHL66124.1 | electron transfer flavoprotein-ubiquinone oxidoreductase | 2.99696 | + |
| NHL68498.1 | DUF4148 domain-containing protein | 2.97625 | + |
| NHL70004.1 | oxidoreductase | 2.70688 | + |
| NHL65234.1 | anthranilate synthase component I | 2.67805 | + |
| NHL69607.1 | enoyl-CoA hydratase/isomerase family protein | 2.66751 | + |
| NHL67218.1 | site-specific tyrosine recombinase XerD | 2.65281 | + |
| NHL66091.1 | CoA-acylating methylmalonate-semialdehyde dehydrogenase | 2.61771 | + |
| NHL66438.1 | lipocalin-like domain-containing protein | 2.56322 | + |
| NHL65232.1 | anthranilate phosphoribosyltransferase | 2.54011 | + |
| NHL65976.1 | phosphohistidine phosphatase SixA | 2.52072 | |
| NHL67947.1 | phosphatase | 2.4792 | + |
| NHL64862.1 | class IV adenylate cyclase | 2.47569 | + |
| NHL67236.1 | kynureninase | 2.4506 | + |
| NHL66444.1 | zinc-binding alcohol dehydrogenase family protein | 2.44262 | + |
| NHL69872.1 | hypothetical protein EIB72_26190 | 2.43349 | |
| NHL64889.1 | AMP-binding protein | 2.41337 | + |
| NHL65836.1 | glucarate dehydratase | 2.40829 | |
| NHL70849.1 | amino acid racemase | 2.39926 | + |
| NHL69007.1 | M4 family metallopeptidase | 2.38937 | + |
| NHL65669.1 | DNA-directed RNA polymerase subunit omega | 2.34394 | + |
| NHL66551.1 | glycosyltransferase family 4 protein | 2.30574 | |
| NHL67472.1 | 16S rRNA (guanine(966)-N(2))-methyltransferase RsmD | 2.25918 | + |
| NHL70680.1 | ABC transporter substrate-binding protein | 2.19513 | + |
| NHL65233.1 | aminodeoxychorismate/anthranilate synthase component II | 2.14417 | + |
| NHL65231.1 | indole-3-glycerol phosphate synthase TrpC | 2.04142 | + |
| NHL68728.1 | acetyl-CoA hydrolase/transferase family protein | 2.02055 | + |
| NHL66748.1 | sensor histidine kinase | 2.01995 | + |
| NHL66014.1 | xanthine dehydrogenase family protein molybdopterin-binding subunit | 2.01864 | + |
| NHL68887.1 | SDR family oxidoreductase | 1.96864 | + |
| NHL65559.1 | symmetrical bis(5-nucleosyl)-tetraphosphatase | 1.89411 | |
| NHL67228.1 | class I SAM-dependent methyltransferase | 1.88029 | + |
| NHL65418.1 | non-specific DNA-binding protein DpsA | 1.83474 | + |
| NHL69673.1 | ABC transporter substrate-binding protein | 1.83123 | |
| NHL67258.1 | zinc ABC transporter solute-binding protein | 1.83042 | + |
| NHL70390.1;NHL69274.1 | fumarylacetate | 1.83006 | + |
| NHL66579.1 | fatty-acid-CoA ligase | 1.80494 | |
| NHL67229.1 | DUF72 domain-containing protein | 1.79267 | |
| NHL70744.1 | cupin domain-containing protein | 1.78307 | |
| NHL65762.1 | class II fumarate hydratase | 1.73968 | + |
| NHL64932.1 | cytochrome c5 family protein | 1.73266 | |
| NHL67855.1 | acetoacetate decarboxylase | 1.70752 | + |
| NHL70449.1 | DUF4148 domain-containing protein | 1.65259 | + |
| NHL70146.1 | PRC-barrel domain containing protein | 1.65161 | + |
| NHL69916.1 | aldehyde dehydrogenase (NADP(+)) | 1.63026 | + |
| NHL67237.1 | tryptophan 2,3-dioxygenase | 1.62703 | + |
| NHL70102.1 | fumarylacetate hydrolase family protein | 1.62459 | + |
| NHL70756.1 | haloacid dehalogenase type II | 1.61909 | |
| NHL67989.1 | 5/3-nucleotidase SurfE | 1.59991 | |
| NHL65333.1 | 16S rRNA (uracil(1498)-N(3))-methyltransferase | 1.59734 | |
| NHL66795.1 | phasin family protein | 1.59558 | + |
| NHL70154.1 | aldolase | 1.59418 | |

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| NHL68017.1 | ubiquinone-dependent pyruvate dehydrogenase | 1.58407 | + |
| NHL68515.1 | SRPBCC domain-containing protein | 1.57737 | |
| NHL68622.1 | DUF427 domain-containing protein | 1.54425 | + |
| NHL69046.1 | isocitrate lyase | 1.54064 | + |
| NHL68923.1 | cytosine deaminase | 1.53863 | |
| NHL70716.1 | SnoAL-like domain-containing protein | 1.53435 | |
| NHL69821.1 | enoyl-CoA hydratase/isomerase family protein | 1.52505 | |
| NHL70915.1 | dihydrolipoyl dehydrogenase | 1.5232 | + |
| NHL64989.1 | pyridoxamine 5-phosphate oxidase | 1.51982 | + |
| NHL67701.1 | High potential iron-sulfur protein | 1.51602 | |
| NHL67616.1 | hydroxymethylglutaryl-CoA lyase | 1.51198 | + |
| NHL65249.1 | division/cell wall cluster transcriptional repressor MraZ | 1.51004 | |
| NHL68535.1 | glutathione S-transferase | 1.48493 | |
| NHL70162.1 | SnoAL-like domain-containing protein | 1.44812 | + |
| NHL67883.1 | universal stress protein | 1.44773 | + |
| NHL67071.1 | aldehyde dehydrogenase family protein | 1.44719 | |
| NHL67862.1 | hypothetical protein EIB72_15895 | 1.44548 | + |
| NHL67581.1 | MBL fold metallo-hydrolase | 1.43525 | + |
| NHL68666.1 | phospholipase | 1.42518 | |
| NHL67622.1 | nitronate monooxygenase | 1.41675 | + |
| NHL67820.1 | membrane protein insertase YidC | 1.40851 | |
| NHL70105.1 | GNAT family N-acetyltransferase | 1.4064 | + |
| NHL67143.1 | SDR family oxidoreductase | 1.4033 | |
| NHL65530.1 | polyketide cyclase | 1.39811 | + |
| NHL66894.1 | enoyl-CoA hydratase | 1.39469 | |
| NHL67645.1 | heavy-metal-associated domain-containing protein | 1.38503 | + |
| NHL70531.1 | MEKHLA domain-containing protein | 1.36346 | + |
| NHL70546.1 | YncE family protein | 1.36157 | + |
| NHL71138.1 | 3-deoxy-D-arabino-heptulosonate 7-phosphate synthase | 1.35114 | + |
| NHL67438.1 | TIGR01841 family phasin | 1.34632 | + |
| NHL69118.1 | aldo/keto reductase | 1.32054 | + |
| NHL65416.1 | catalase/peroxidase HPI | 1.30071 | + |
| NHL67086.1 | DUF1311 domain-containing protein | 1.26373 | |
| NHL66297.1 | N(5)-hydroxyornithine transformylase PvdF | 1.26353 | |
| NHL70810.1 | chaperonin GroEL | 1.24759 | |
| NHL65230.1 | CYTH domain-containing protein | 1.23925 | |
| NHL65877.1 | Lrp/AsnC family transcriptional regulator | 1.23638 | |
| NHL66879.1;NHL67854.1 | 3-hydroxybutyrate dehydrogenase | 1.22692 | + |
| NHL68867.1 | rhodanese-related sulfurtransferase | 1.22104 | |
| NHL70496.1 | hypothetical protein EIB72_29410 | 1.21287 | + |
| NHL67614.1 | VOC family protein | 1.20322 | |
| NHL66764.1 | gamma carbonic anhydrase family protein | 1.18438 | |
| NHL66077.1 | glucose 1-dehydrogenase | 1.18065 | |
| NHL66578.1 | 3-hydroxyacyl-CoA dehydrogenase | 1.16955 | + |
| NHL68619.1 | iron-containing alcohol dehydrogenase | 1.16091 | |
| NHL66134.1 | alpha/beta hydrolase | 1.15595 | |
| NHL66218.1 | heme-degrading domain-containing protein | 1.15038 | |
| NHL67231.1 | selenium-binding protein | 1.14344 | |
| NHL70087.1 | N-acylglucosamine 2-epimerase | 1.13754 | |
| NHL69785.1 | NAD-binding protein | 1.12814 | + |
| NHL65426.1 | cob(I)yrinic acid a,c-diamide adenosyltransferase | 1.12335 | + |
| NHL65116.1 | FAD-dependent oxidoreductase | 1.12056 | + |
| NHL64890.1 | transporter substrate-binding domain-containing protein | 1.1196 | |
| NHL70504.1 | hypothetical protein EIB72_29450 | 1.11649 | |
| NHL67253.1 | sugar ABC transporter substrate-binding protein | 1.11557 | |
| NHL67406.1 | DJ-1/Pfpl family protein | 1.11443 | + |
| NHL69678.1 | fumarylacetate hydrolase family protein | 1.11418 | + |
| NHL67225.1 | thioredoxin | 1.11143 | + |
| NHL69677.1 | L-fuconate dehydratase | 1.09697 | |
| NHL70380.1 | nuclear transport factor 2 family protein | 1.09631 | + |
| NHL71086.1 | bacteriocin family protein | 1.09027 | + |
| NHL65018.1 | NAD(P)-dependent oxidoreductase | 1.08915 | + |
| NHL65446.1 | 3-methyl-2-oxobutanoate hydroxymethyltransferase | 1.08836 | + |
| NHL71137.1 | 2-keto-4-pentenoate hydratase | 1.08249 | |
| NHL70500.1 | amino acid adenylation domain-containing protein | 1.08138 | + |
| NHL70494.1 | hypothetical protein EIB72_29400 | 1.07587 | + |
| NHL69588.1 | amyo-alpha-1,6-glucosidase | 1.0701 | |
| NHL69676.1 | SDR family oxidoreductase | 1.06547 | |
| NHL66918.1 | NAD(P)H-quinone oxidoreductase | 1.06463 | + |
| NHL68192.1 | leucyl aminopeptidase | 1.05051 | |
| NHL68582.1 | VOC family protein | 1.04428 | + |
| NHL69354.1 | class I SDM-dependent methyltransferase | 1.03983 | |
| NHL65172.1 | DotU family type IV/VI secretion system protein | 1.03426 | |
| NHL67266.1 | efflux RND transporter permease subunit | 1.02751 | |
| NHL69357.1 | arylamine N-acetyltransferase | 1.02656 | |
| NHL68449.1 | organic hydroperoxide resistance protein | 1.02579 | |
| NHL65861.1 | peroxiredoxin | 1.02475 | + |
| NHL67268.1 | TetR family transcriptional regulator | 1.0188 | |
| NHL64871.1 | ABC transporter substrate-binding protein | 1.01755 | + |
| NHL66487.1 | RNA polymerase sigma factor RpoS | 1.0128 | |
| NHL70262.1 | S-(hydroxymethyl)glutathione synthase | 1.00183 | |
| NHL65497.1 | SDR family NAD(P)-dependent oxidoreductase | 0.991478 | + |
| NHL66457.1 | class I poly(R)-hydroxyalkanoic acid synthase | 0.986418 | + |
| NHL68998.1 | antibiotic biosynthesis monooxygenase | 0.983224 | |
| NHL69587.1 | hypothetical protein EIB72_24740 | 0.973213 | |
| NHL68238.1 | FAD-containing oxidoreductase | 0.973174 | + |
| NHL70553.1 | dihydronicotinate synthase family protein | 0.973125 | |
| NHL66129.1;NHL70935.1 | CoA transferase subunit B | 0.970384 | |
| NHL67587.1 | adenosylmethionine-8-amino-7-oxononanoate transaminase | 0.967972 | |
| NHL66895.1 | thiol:disulfide oxidoreductase | 0.967658 | |
| NHL71112.1 | glutathione S-transferase family protein | 0.960644 | |
| NHL65663.1 | hypothetical protein EIB72_04545 | 0.960079 | + |
| NHL64897.1 | DNA alkylation response protein | 0.957767 | |
| NHL67211.1 | DUF3579 domain-containing protein | 0.954816 | |
| NHL70228.1 | SDR family oxidoreductase | 0.95291 | |
| NHL65195.1 | YegP family protein | 0.945419 | + |
| NHL68096.1 | helix-turn-helix transcriptional regulator | 0.945122 | |
| NHL68520.1 | CoA ester lyase | 0.943452 | |

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| NHL64859.1 | 4a-hydroxytetrahydrobiopterin dehydratase | 0.942357 | |
| NHL67072.1 | SDR family oxidoreductase | 0.937981 | + |
| NHL67470.1 | Yfh1 family 4Fe-4S dicluster ferredoxin | 0.937948 | |
| NHL65933.1 | malonate decarboxylase subunit alpha | 0.936485 | |
| NHL65880.1 | Fe(3+) ABC transporter substrate-binding protein | 0.932474 | + |
| NHL67590.1 | biotin synthase BioB | 0.931899 | + |
| NHL65244.1 | enoyl-CoA hydratase | 0.927398 | + |
| NHL68232.1 | hypothetical protein EIB72_17775 | 0.926587 | + |
| NHL65537.1 | DsbA family oxidoreductase | 0.919928 | |
| NHL66807.1 | S9 family peptidase | 0.916667 | |
| NHL65264.1 | peroxiredoxin | 0.911151 | |
| NHL70493.1 | PLP-dependent aminotransferase family protein | 0.909181 | |
| NHL66463.1 | YdcH family protein | 0.90447 | |
| NHL67589.1 | dethiobiotin synthase | 0.904186 | |
| NHL64854.1 | NADH:flavin oxidoreductase/NADH oxidase | 0.902859 | |
| NHL70025.1 | ABC transporter substrate-binding protein | 0.902599 | + |
| NHL65842.1 | LLM class flavin-dependent oxidoreductase | 0.901929 | |
| NHL64918.1 | thiamine pyrophosphate-binding protein | 0.901844 | + |
| NHL66597.1 | glycerate kinase | 0.901342 | |
| NHL64985.1 | dienelactone hydrolase family protein | 0.891255 | + |
| NHL65863.1 | NYN domain-containing protein | 0.890667 | |
| NHL70217.1 | alpha/beta fold hydrolase | 0.89036 | |
| NHL67244.1 | xylulokinase | 0.889406 | + |
| NHL65352.1 | DNA polymerase III subunit delta | 0.888267 | |
| NHL70460.1 | TOBE domain-containing protein | 0.883684 | |
| NHL67064.1 | P-II family nitrogen regulator | 0.874025 | + |
| NHL68833.1 | DUF3564 family protein | 0.866711 | + |
| NHL71122.1 | DUF4011 domain-containing protein | 0.865105 | + |
| NHL66455.1 | 3-ketoacyl-ACP reductase | 0.862083 | + |
| NHL68376.1 | aldehyde dehydrogenase family protein | 0.860981 | + |
| NHL67584.1 | SDR family oxidoreductase | 0.85936 | |
| NHL66899.1 | pimeloyl-CoA dehydrogenase large subunit | 0.856785 | |
| NHL66135.1 | RidA family protein | 0.856109 | |
| NHL67407.1 | MarR family transcriptional regulator | 0.855038 | |
| NHL65549.1 | chaperonin GroEL | 0.854628 | + |
| NHL66516.1 | molybdenum cofactor biosynthesis protein MoaE | 0.853041 | |
| NHL67793.1 | Paal family thioesterase | 0.853012 | + |
| NHL66231.1 | GNAT family N-acetyltransferase | 0.850117 | |
| NHL69876.1 | SB/S53 family peptidase | 0.845196 | + |
| NHL67560.1 | type III pantothenate kinase | 0.844824 | |
| NHL67161.1 | L-aspartate oxidase | 0.840496 | + |
| NHL66618.1 | acetylornithine deacetylase | 0.840385 | + |
| NHL66040.1 | cellulase | 0.836685 | |
| NHL67379.1 | nitrate reductase maturation protein NarM | 0.836613 | |
| NHL64906.1 | GyrL-like domain-containing protein | 0.835655 | |
| NHL66155.1 | pyridoxal phosphate-dependent aminotransferase | 0.831394 | |
| NHL65929.1 | 3-hydroxyacyl-CoA dehydrogenase | 0.831327 | + |
| NHL65441.1 | nucleotide exchange factor GrpE | 0.828821 | |
| NHL68300.1 | alpha/beta hydrolase | 0.828585 | + |
| NHL65298.1 | histone H1-like DNA-binding protein | 0.827909 | |
| NHL68695.1 | cytochrome c | 0.824148 | + |
| NHL65720.1 | integration host factor subunit beta | 0.822378 | |
| NHL67171.1 | bifunctional phosphopantetheinylcysteine decarboxylase/phosphopantetheine--cysteine ligase | 0.822161 | |
| NHL70190.1 | OsmC family protein | 0.817431 | |
| NHL70049.1 | glutathione S-transferase | 0.81305 | + |
| NHL70497.1 | phosphopantetheine-binding protein | 0.812286 | |
| NHL65110.1 | transposase | 0.811846 | + |
| NHL65256.1 | UDP-N-acetylmuramoyl-L-alanine-D-glutamate ligase | 0.806209 | |
| NHL67588.1 | 8-amino-7-oxononanoate synthase | 0.803989 | |
| NHL65716.1 | prephenate dehydrogenase/arenate dehydrogenase family protein | 0.803286 | |
| NHL67474.1 | maleylacetooacetate isomerase | 0.80139 | |
| NHL66692.1 | glutathione peroxidase | 0.79817 | |
| NHL66442.1 | hypothetical protein EIB72_08590 | 0.796132 | |
| NHL65104.1 | sn-glycerol-3-phosphate ABC transporter substrate-binding protein UggB | 0.795534 | + |
| NHL66898.1 | pimeloyl-CoA dehydrogenase small subunit | 0.795148 | + |
| NHL67731.1 | L-glyceraldehyde 3-phosphate reductase | 0.794374 | + |
| NHL69456.1 | SDR family NAD(P)-dependent oxidoreductase | 0.791907 | |
| NHL69820.1 | acetyl/propionyl/methylcrotonyl-CoA carboxylase subunit alpha | 0.787162 | + |
| NHL65823.1 | GAF domain-containing protein | 0.785806 | |
| NHL66859.1:NHL70605.1 | acetate-CoA ligase | 0.781846 | + |
| NHL65629.1 | DUF1993 domain-containing protein | 0.773422 | + |
| NHL69002.1 | NAD-dependent succinate-semialdehyde dehydrogenase | 0.771677 | + |
| NHL67987.1 | cupin domain-containing protein | 0.769646 | |
| NHL65026.1 | flavodoxin family protein | 0.767852 | + |
| NHL69661.1 | hypothetical protein EIB72_25120 | 0.766486 | |
| NHL66495.1 | thioredoxin TrxA | 0.765495 | + |
| NHL70444.1 | dienelactone hydrolase family protein | 0.757029 | + |
| NHL66456.1 | acetyl-CoA C-acetyltransferase | 0.754183 | + |
| NHL66383.1 | Laci family DNA-binding transcriptional regulator | 0.752158 | |
| NHL68497.1 | NADP-dependent phosphogluconate dehydrogenase | 0.743765 | + |
| NHL65687.1 | aminopeptidase N | 0.742638 | + |
| NHL66105.1 | HlyD family secretion protein | 0.742208 | |
| NHL68856.1 | MOSC domain-containing protein | 0.739541 | |
| NHL69290.1 | ABC transporter substrate-binding protein | 0.732824 | |
| NHL65124.1 | ABC transporter substrate-binding protein | 0.728377 | + |
| NHL67938.1 | acyl-CoA dehydrogenase | 0.721736 | |
| NHL68722.1 | phosphonopyruvate decarboxylase | 0.719721 | |
| NHL71065.1 | sigma-54-dependent Fis family transcriptional regulator | 0.71828 | |
| NHL65520.1 | 2-hydroxyacid dehydrogenase | 0.717461 | |
| NHL65225.1 | UbiH/UbiF family hydroxylase | 0.714683 | |
| NHL67184.1 | elongation factor G | 0.710492 | + |
| NHL67745.1 | ATP-dependent protease subunit HslV | 0.71017 | + |
| NHL65392.1 | FMN-binding glutamate synthase family protein | 0.708843 | |
| NHL66260.1 | sugar ABC transporter substrate-binding protein | 0.7075 | |
| NHL67267.1 | efflux RND transporter periplasmic adaptor subunit | 0.703634 | + |
| NHL65178.1 | type VI secretion system tube protein Hcp | 0.701544 | |
| NHL67471.1 | pantetheine-phosphate adenylyltransferase | 0.696357 | |
| NHL66806.1 | exodeoxyribonuclease III | 0.694358 | |

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| NHL64987.1 | branched-chain amino acid ABC transporter substrate-binding protein | 0.69343 | + |
| NHL66201.1 | ABC transporter substrate-binding protein | 0.68959 | + |
| NHL65096.1 | iron donor protein CyaY | 0.68987 | + |
| NHL67230.1 | peptide-methionine (S)-oxide reductase MsrA | 0.68798 | + |
| NHL65943.1 | glutathione S-transferase | 0.68788 | |
| NHL65137.1 | imidazole glycerol phosphate synthase subunit HisF | 0.686556 | |
| NHL68906.1 | 2,4-dihydroxyacetophenone dioxygenase | 0.684067 | |
| NHL68133.1 | cyclic di-GMP phosphodiesterase | 0.673603 | |
| NHL71100.1 | type VI secretion system tip protein VgrG | 0.673267 | |
| NHL69161.1 | glutamate/aspartate ABC transporter substrate-binding protein | 0.672281 | |
| NHL67151.1 | ABC transporter ATP-binding protein | 0.670457 | |
| NHL69403.1 | transcription elongation factor GreA/B | 0.670398 | |
| NHL67550.1 | alpha/beta hydrolase | 0.669722 | |
| NHL66441.1 | aldehyde dehydrogenase family protein | 0.667632 | |
| NHL65700.1 | tetratricopeptide repeat protein | 0.666366 | |
| NHL70999.1 | NAD(P)-dependent alcohol dehydrogenase | 0.66386 | |
| NHL66744.1 | RNA methyltransferase | 0.662439 | |
| NHL65357.1 | bifunctional 4-hydroxy-2-oxoglutarate aldolase/2-dehydro-3-deoxy-phosphogluconate | 0.662126 | + |
| NHL65273.1 | dephospho-CoA kinase | 0.661343 | + |
| NHL64844.1 | type II secretion system ATPase GspE | 0.660074 | |
| NHL64881.1 | FOF1 ATP synthase subunit A | 0.657068 | |
| NHL64957.1 | H-NS histone family protein | 0.654794 | |
| NHL67122.1 | DUF2486 family protein | 0.654097 | |
| NHL67894.1 | 3-oxoadipate enol-lactonase | 0.647717 | |
| NHL70881.1 | glycosyltransferase family 25 protein | 0.640355 | + |
| NHL66614.1 | carboxymuconolactone decarboxylase family protein | 0.637697 | |
| NHL69875.1 | peptidase S1 | 0.636969 | |
| NHL67334.1 | gamma-glutamyltransferase family protein | 0.635982 | |
| NHL64857.1 | response regulator transcription factor | 0.63534 | + |
| NHL70885.1 | MBL fold metallo-hydrolase | 0.626403 | |
| NHL65103.1 | deoxyguanosinetriphosphate triphosphohydrolase | 0.625925 | |
| NHL65108.1 | glycerophosphodiester phosphodiesterase | 0.62522 | |
| NHL67803.1 | phosphonate utilization associated transcriptional regulator | 0.624117 | |
| NHL66513.1 | ATP-dependent chaperone ClpB | 0.623187 | + |
| NHL64992.1 | Lrp/AsnC family transcriptional regulator | 0.620548 | |
| NHL67487.1 | SIS domain-containing protein | 0.618606 | |
| NHL68618.1 | antibiotic biosynthesis monooxygenase | 0.61244 | |
| NHL69822.1 | methylcrotonoyl-CoA carboxylase | 0.610435 | |
| NHL65374.1 | hypothetical protein EIB72_03065 | 0.610241 | |
| NHL66613.1 | peroxiredoxin | 0.609943 | + |
| NHL67208.1 | tetratricopeptide repeat protein | 0.609455 | |
| NHL66634.1 | allantoinase PuuE | 0.605169 | |
| NHL67451.1 | HAD family hydrolase | 0.604417 | |
| NHL69325.1 | ATP-binding domain-containing protein | 0.602269 | |
| NHL66474.1 | RNA chaperone Hfq | 0.60166 | + |
| NHL68960.1 | universal stress protein | 0.5991 | |
| NHL65720.1 | molybdopterin-synthase adenyltransferase MoeB | 0.59763 | |
| NHL65789.1 | DUF177 domain-containing protein | 0.597295 | |
| NHL67818.1 | tRNA uridine-5-carboxymethylaminomethyl(34) synthesis GTPase Mnme | 0.596999 | |
| NHL67124.1 | leucyl aminopeptidase | 0.595577 | + |
| NHL66128.1:NHL70936.1 | CoA transferase subunit A | 0.593249 | |
| NHL65356.1 | phosphogluconate dehydratase | 0.592736 | |
| NHL69935.1 | LysR family transcriptional regulator | 0.591894 | |
| NHL66576.1 | acetyl-CoA C-acyltransferase | 0.59132 | |
| NHL66998.1 | MoxR family ATPase | 0.590656 | + |
| NHL70498.1 | chlorinating enzyme | 0.590124 | + |
| NHL64990.1 | H-NS histone family protein | 0.588321 | |
| NHL64926.1 | glycine cleavage system protein GcvH | 0.586657 | |
| NHL66281.1 | molecular chaperone | 0.583934 | |
| NHL65627.1 | 6,7-dimethyl-8-ribityllumazine synthase | 0.583464 | |
| NHL66640.1 | DUF1992 domain-containing protein | 0.582496 | |
| NHL66220.1 | enoyl-CoA hydratase/isomerase family protein | 0.581801 | |
| NHL66955.1 | quinone oxidoreductase | 0.581153 | |
| NHL65830.1 | trehalose-phosphatase | 0.579094 | |
| NHL70123.1 | cupin domain-containing protein | 0.57666 | |
| NHL66611.1 | two-component system response regulator OmpR | 0.575678 | + |
| NHL68390.1 | OsmC family protein | 0.571621 | |
| NHL67097.1 | DUF3460 family protein | 0.570415 | |
| NHL65196.1 | class I SAM-dependent methyltransferase | 0.568356 | |
| NHL69401.1 | CBS domain-containing protein | 0.567722 | |
| NHL66583.1 | BolA family transcriptional regulator | 0.567639 | |
| NHL67863.1 | hypothetical protein EIB72_15900 | 0.566806 | |
| NHL68518.1 | bifunctional 2-methylcitrate dehydratase/aconitate hydratase | 0.56423 | |
| NHL67446.1 | DUF4743 domain-containing protein | 0.563692 | |
| NHL65507.1 | DUF883 domain-containing protein | 0.562731 | |
| NHL67515.1 | protein-export chaperone SecB | 0.561958 | |
| NHL69552.1 | hypothetical protein EIB72_24560 | 0.561661 | |
| NHL70406.1 | alpha/beta hydrolase | 0.558993 | |
| NHL67176.1 | cold-shock protein | 0.554025 | |
| NHL65142.1 | Sec-independent protein translocase subunit TatA | 0.551369 | |
| NHL69914.1 | 5-dehydro-4-deoxyglucurate dehydratase | 0.549973 | |
| NHL65241.1 | 2-(1,2-epoxy-1,2-dihydrophenyl)acetyl-CoA isomerase | 0.548491 | |
| NHL67001.1 | transaldolase | 0.547844 | + |
| NHL67659.1 | glutathione-disulfide reductase | 0.544897 | + |
| NHL66561.1 | NRDE family protein | 0.543734 | |
| NHL68468.1 | NAD(P)/FAD-dependent oxidoreductase | 0.541695 | + |
| NHL66625.1 | NAD(P)-dependent oxidoreductase | 0.540616 | + |
| NHL66546.1 | peptidoglycan-binding protein LysM | 0.539874 | |
| NHL69400.1 | GTP cyclohydrolase II | 0.539249 | |
| NHL70115.1 | hypothetical protein EIB72_27435 | 0.535873 | |
| NHL69973.1 | Rieske 2Fe-2S domain-containing protein | 0.534189 | |
| NHL68469.1 | 30S ribosomal protein S21 | 0.534031 | |
| NHL70481.1 | dihydroxyacetone kinase subunit Dhak | 0.53223 | + |
| NHL68721.1 | 2-aminoethylphosphonate aminotransferase | 0.530941 | + |
| NHL66332.1 | glutathione S-transferase | 0.529807 | |
| NHL67025.1 | DUF4399 domain-containing protein | 0.529423 | |
| NHL66183.1 | CpaF family protein | 0.529236 | |
| NHL65445.1 | bifunctional anthranilate synthase component I family protein/class IV aminotransferase | 0.528233 | |

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| NHL67691.1 | 5-oxoprolinase subunit PxpB | 0.526733 | |
| NHL65517.1 | fumarylacetate | 0.525132 | |
| NHL70222.1 | NAD(P)H-dependent oxidoreductase | 0.524754 | |
| NHL65427.1 | NO-inducible flavohemoprotein | 0.521289 | |
| NHL66286.1 | TauD/TfdA family dioxygenase | 0.518872 | |
| NHL68527.1 | succinate dehydrogenase assembly factor 2 | 0.518597 | |
| NHL66493.1 | YbaB/EbfC family nucleoid-associated protein | 0.515059 | |
| NHL66012.1 | FadR family transcriptional regulator | 0.513286 | |
| NHL67573.1 | DUF1840 domain-containing protein | 0.513131 | |
| NHL69970.1 | tryptophan 7-halogenase | 0.512232 | |
| NHL65146.1 | Nif3-like dinuclear metal center hexameric protein | 0.510902 | |
| NHL67726.1 | serine/threonine protein kinase | 0.503579 | |
| NHL68940.1 | aspartate/tyrosine/aromatic aminotransferase | 0.500905 | |
| NHL65153.1 | cystine ABC transporter substrate-binding protein | 0.497312 | + |
| NHL64867.1 | ABC transporter substrate-binding protein | 0.495896 | |
| NHL65637.1 | glucose-6-phosphate dehydrogenase | 0.494884 | |
| NHL66379.1 | Spy/CpxP family protein refolding chaperone | 0.494778 | |
| NHL67966.1 | peptide ABC transporter ATPase | 0.494275 | |
| NHL67199.1 | DUF3380 domain-containing protein | 0.493455 | |
| NHL70499.1 | acyl carrier protein | 0.491154 | |
| NHL66709.1 | malate synthase A | 0.490989 | |
| NHL66246.1 | tRNA 2-selenouridine(34) synthase MnmH | 0.489621 | |
| NHL66999.1 | VWA domain-containing protein | 0.489319 | |
| NHL65456.1 | tRNA (adenosine(37)-N6)-dimethylallyltransferase MiaA | 0.486965 | |
| NHL70874.1 | OsmC family protein | 0.485847 | |
| NHL67711.1 | XdhC family protein | 0.485643 | |
| NHL68459.1 | dienelactone hydrolase family protein | 0.484833 | |
| NHL69353.1 | NAD-glutamate dehydrogenase | 0.48465 | |
| NHL68144.1 | isocitrate lyase/phosphoenolpyruvate mutase family protein | 0.483954 | |
| NHL66595.1 | ATP-dependent Clp endopeptidase proteolytic subunit ClpP | 0.482777 | + |
| NHL70495.1 | succinylglutamate desuccinylase | 0.482595 | |
| NHL67200.1 | type VI secretion system tip protein VgrG | 0.482047 | |
| NHL69000.1 | xanthine dehydrogenase family protein molybdopterin-binding subunit | 0.479136 | |
| NHL71002.1 | HAD family hydrolase | 0.477736 | |
| NHL67965.1 | fucose-binding lectin II | 0.476523 | |
| NHL67746.1 | ATP-dependent protease ATPase subunit HslU | 0.476189 | + |
| NHL70047.1 | HIT domain-containing protein | 0.476026 | |
| NHL67166.1 | RsmB/NOP family class I SAM-dependent RNA methyltransferase | 0.475195 | |
| NHL65365.1 | glutamate/aspartate ABC transporter substrate-binding protein | 0.47475 | |
| NHL65893.1 | pentapeptide MKKDX repeat protein | 0.472959 | |
| NHL66292.1 | amino acid adenylation domain-containing protein | 0.471443 | |
| NHL65198.1 | DUF1415 domain-containing protein | 0.470397 | |
| NHL65826.1 | GNAT family N-acetyltransferase | 0.46919 | |
| NHL68161.1 | hsp70 family protein | 0.468896 | |
| NHL70424.1 | ATPase | 0.46866 | |
| NHL65950.1 | hydroxyacylglutathione hydrolase | 0.468624 | |
| NHL67615.1 | glyoxylate/hydroxypyruvate reductase A | 0.468273 | |
| NHL65380.1 | D-tyrosyl-tRNA(Tyr) deacylase | 0.467927 | |
| NHL66705.1 | isocitrate lyase | 0.460974 | |
| NHL67475.1 | DNA-binding protein YbbI | 0.459962 | |
| NHL66518.1 | molybdopterin molybdotransferase MoeA | 0.459037 | |
| NHL69295.1 | ABC transporter substrate-binding protein | 0.458761 | |
| NHL66266.1 | PrkA family serine protein kinase | 0.458455 | + |
| NHL70890.1 | diaminobutyrate-2-oxoglutarate transaminase family protein | 0.457332 | |
| NHL68724.1 | phosphocholine cytidylyltransferase family protein | 0.456259 | |
| NHL67788.1 | thioredoxin family protein | 0.456153 | |
| NHL66581.1 | peptide-methionine (R)-S-oxide reductase MsrB | 0.456136 | |
| NHL66962.1 | nicotinate-nucleotide adenylyltransferase | 0.453728 | |
| NHL67739.1 | diaminopimelate epimerase | 0.452986 | + |
| NHL67387.1 | dihydroneopterin triphosphate diphosphatase | 0.450181 | |
| NHL65093.1 | protein-methionine-sulfoxide reductase catalytic subunit MsrP | 0.44958 | |
| NHL65432.1 | carbon-nitrogen hydrolase family protein | 0.448197 | |
| NHL67201.1 | superoxide dismutase | 0.448188 | |
| NHL65638.1 | carbohydrate ABC transporter substrate-binding protein | 0.444565 | + |
| NHL65434.1 | bifunctional | 0.444553 | |
| NHL65548.1 | co-chaperone GroES | 0.443324 | |
| NHL69910.1 | riboflavin synthase subunit alpha | 0.442115 | |
| NHL68387.1 | fumarylacetate hydrolase family protein | 0.441957 | + |
| NHL69107.1 | MerR family transcriptional regulator | 0.438054 | |
| NHL66144.1 | pseudouridine synthase | 0.437874 | |
| NHL66680.1 | 3-keto-5-aminohexanoate cleavage protein | 0.437737 | |
| NHL68927.1 | molecular chaperone DnaK | 0.437695 | |
| NHL65443.1 | IclR family transcriptional regulator | 0.434821 | + |
| NHL70064.1 | type II toxin-antitoxin system Phd/YefM family antitoxin | 0.434196 | |
| NHL65429.1 | alpha,alpha-trehalose-phosphate synthase (UDP-forming) | 0.433247 | |
| NHL69042.1 | histidinol-phosphate transaminase | 0.428503 | |
| NHL67469.1 | OmpA family protein | 0.427441 | |
| NHL65711.1 | molybdopterin oxidoreductase family protein | 0.425616 | |
| NHL65245.1 | acid phosphatase | 0.425252 | |
| NHL69044.1 | amidase | 0.422439 | |
| NHL65695.1 | YdiU family protein | 0.416358 | |
| NHL66580.1 | ribosome-associated translation inhibitor RaiA | 0.415556 | |
| NHL67456.1 | succinate-CoA ligase subunit alpha | 0.412403 | |
| NHL67305.1 | hypothetical protein EIB72_23785 | 0.412393 | |
| NHL69399.1 | S-formylglutathione hydrolase | 0.409712 | |
| NHL67261.1 | nicotinate phosphoribosyltransferase | 0.409259 | + |
| NHL65772.1 | MarR family transcriptional regulator | 0.407604 | |
| NHL66598.1 | 30S ribosomal protein S3 | 0.406848 | |
| NHL65064.1 | RNA polymerase sigma factor RpoE | 0.406796 | |
| NHL65798.1 | 50S ribosomal protein L7/L12 | 0.402394 | |
| NHL65049.1 | ammonia-dependent NAD(+) synthetase | 0.40085 | |
| NHL69874.1 | YbeD family protein | 0.399776 | |
| NHL67547.1 | DUF1864 family protein | 0.399127 | |
| NHL69971.1 | transcriptional repressor | 0.394388 | |
| NHL67257.1 | 30S ribosomal protein S20 | 0.393841 | |
| NHL67210.1 | bifunctional 2-polyprenyl-6-hydroxyphenol methylase/3-demethylubiquinol 3-O-methylase | 0.393765 | |
| NHL65710.1 | oligoribonuclease | 0.392649 | |
| NHL65750.1 | | 0.390441 | |

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| NHL67394.1 | Tim44 domain-containing protein | 0.389902 | |
| NHL65630.1 | riboflavin synthase | 0.388119 | |
| NHL69397.1 | hypothetical protein EIB72_23775 | 0.388105 | |
| NHL65474.1 | capsular biosynthesis protein | 0.387922 | |
| NHL67219.1 | methylated-DNA-[protein]-cysteine S-methyltransferase | 0.387795 | |
| NHL65132.1 | histidinol-phosphate transaminase | 0.386084 | |
| NHL66156.1 | SMC-Scp complex subunit ScpB | 0.384501 | |
| NHL67207.1 | SDR family NAD(P)-dependent oxidoreductase | 0.383081 | |
| NHL68852.1 | response regulator | 0.38299 | |
| NHL70880.1 | hypothetical protein EIB72_31385 | 0.382779 | |
| NHL69557.1 | DUF1311 domain-containing protein | 0.38231 | |
| NHL65128.1 | BolA family transcriptional regulator | 0.380705 | |
| NHL66530.1 | peroxiredoxin | 0.379444 | |
| NHL67685.1 | multifunctional CCA addition/repair protein | 0.378412 | |
| NHL66781.1 | Fe-S cluster assembly protein IscX | 0.377099 | |
| NHL67591.1 | copper homeostasis protein CutC | 0.375401 | |
| NHL67298.1 | hypothetical protein EIB72_13035 | 0.374235 | |
| NHL66313.1 | DUF1993 domain-containing protein | 0.373534 | |
| NHL69422.1 | SDR family oxidoreductase | 0.37311 | |
| NHL70891.1 | SDR family oxidoreductase | 0.372441 | |
| NHL68205.1 | LysR family transcriptional regulator | 0.371342 | |
| NHL65981.1 | DUF2288 domain-containing protein | 0.370471 | |
| NHL64855.1 | SET domain-containing protein-lysine N-methyltransferase | 0.36954 | |
| NHL65176.1 | type VI secretion system contractile sheath small subunit | 0.369334 | + |
| NHL70264.1 | cold-shock protein | 0.368832 | |
| NHL67450.1 | KpsF/GutQ family sugar-phosphate isomerase | 0.368118 | |
| NHL70535.1 | SDR family oxidoreductase | 0.366969 | |
| NHL68464.1 | 1-deoxy-D-xylulose-5-phosphate synthase | 0.365613 | + |
| NHL66407.1 | polyamine ABC transporter substrate-binding protein | 0.360619 | |
| NHL65697.1 | type I glutamine amidotransferase | 0.358919 | |
| NHL66527.1 | formyltransferase | 0.355216 | |
| NHL70501.1 | alpha/beta hydrolase | 0.354952 | |
| NHL67116.1 | EVE domain-containing protein | 0.35495 | |
| NHL65960.1 | ATP-dependent metallopeptidase FtsH/Yme1/Tma family protein | 0.351354 | |
| NHL69569.1 | M20/M25/M40 family metallo-hydrolase | 0.350537 | |
| NHL69428.1 | alkene reductase | 0.348938 | |
| NHL69594.1 | response regulator | 0.34547 | |
| NHL65177.1 | type VI secretion system contractile sheath large subunit | 0.343526 | |
| NHL66298.1 | acetyltransferase | 0.341384 | |
| NHL66117.1 | CBS domain-containing protein | 0.341087 | |
| NHL66373.1 | Yci family protein | 0.341084 | |
| NHL68661.1 | DUF2891 domain-containing protein | 0.338605 | |
| NHL65201.1 | nitroreductase family protein | 0.33847 | |
| NHL70413.1 | dihydropyrimidinase | 0.338162 | |
| NHL65450.1 | HAD-IB family hydrolase | 0.336301 | |
| NHL69323.1 | hypothetical protein EIB72_23405 | 0.335476 | |
| NHL68589.1 | L-seryl-tRNA(Sec) selenium transferase | 0.331626 | |
| NHL67453.1 | lipopolysaccharide transport periplasmic protein LptA | 0.329878 | |
| NHL66119.1 | chorismate synthase | 0.32931 | |
| NHL65320.1 | arabinose ABC transporter substrate-binding protein | 0.327464 | |
| NHL69851.1 | WG repeat-containing protein | 0.327122 | |
| NHL66893.1 | glutathione S-transferase | 0.326604 | |
| NHL67177.1 | multicopper oxidase family protein | 0.32615 | |
| NHL67457.1 | PTS transporter subunit EIIA | 0.325615 | |
| NHL66761.1 | PHP domain-containing protein | 0.321925 | |
| NHL66713.1 | glutamate-tRNA ligase | 0.321131 | |
| NHL65133.1 | imidazoleglycerol-phosphate dehydratase HisB | 0.318876 | |
| NHL65187.1 | OmpA family protein | 0.317052 | |
| NHL66587.1 | FAD-dependent oxidoreductase | 0.316886 | |
| NHL67359.1 | CBS domain-containing protein | 0.314868 | |
| NHL66251.1 | universal stress protein | 0.313405 | |
| NHL71085.1 | Dyp-type peroxidase | 0.310095 | |
| NHL66929.1 | acetolactate synthase small subunit | 0.309961 | |
| NHL67402.1 | RidA family protein | 0.307182 | |
| NHL67838.1 | replication initiation protein | 0.306314 | |
| NHL65139.1 | phosphoribosyl-ATP diphosphatase | 0.306089 | |
| NHL65390.1 | M24 family metallopeptidase | 0.303809 | + |
| NHL69175.1 | hypothetical protein EIB72_22615 | 0.302703 | |
| NHL65655.1 | cell division topological specificity factor MinE | 0.302237 | |
| NHL70682.1 | hypothetical protein EIB72_30365 | 0.299422 | |
| NHL67115.1 | cell division protein ZapA | 0.299292 | |
| NHL68526.1 | succinate dehydrogenase iron-sulfur subunit | 0.299194 | |
| NHL64858.1 | DUF3717 domain-containing protein | 0.296327 | |
| NHL69337.1 | agmatinase | 0.295404 | |
| NHL67306.1 | ADP-forming succinate-CoA ligase subunit beta | 0.292341 | |
| NHL67002.1 | VOC family protein | 0.291141 | |
| NHL65448.1 | 2-amino-4-hydroxy-6-hydroxymethylidihydropteridine diphosphokinase | 0.290876 | |
| NHL68003.1 | mobyldopterin-dependent oxidoreductase | 0.29051 | |
| NHL65664.1 | oxygen-independent coproporphyrinogen III oxidase-like protein | 0.289202 | |
| NHL65309.1 | UDP-N-acetylmuramate:L-alanyl-gamma-D-glutamyl-meso-diaminopimelate ligase | 0.287451 | |
| NHL67847.1 | tartrate dehydrogenase | 0.285404 | |
| NHL64914.1 | aldehyde dehydrogenase | 0.283196 | |
| NHL65729.1 | histone deacetylase family protein | 0.282412 | |
| NHL67100.1 | aspartate 1-decarboxylase | 0.282392 | |
| NHL65555.1 | bifunctional pyr operon transcriptional regulator/uracil phosphoribosyltransferase PyrR | 0.281862 | |
| NHL66679.1 | [protein-PII] uridylyltransferase | 0.280638 | |
| NHL64929.1 | oxidoreductase | 0.279811 | |
| NHL70882.1 | amino acid adenylation domain-containing protein | 0.279195 | |
| NHL70338.1 | Flp pilus assembly complex ATPase component TadA | 0.278358 | |
| NHL67312.1 | MHS family MFS transporter | 0.277201 | |
| NHL69691.1 | alanine--glyoxylate aminotransferase family protein | 0.27702 | |
| NHL68528.1 | citrate (Si)-synthase | 0.275904 | |
| NHL64963.1 | response regulator | 0.274974 | |
| NHL65305.1 | acetyl-CoA carboxylase biotin carboxyl carrier protein | 0.274576 | |
| NHL69149.1 | alpha-2-macroglobulin | 0.27414 | |
| NHL66817.1 | amino-acid N-acetyltransferase | 0.273637 | |
| NHL67463.1 | tetratricopeptide repeat protein | 0.272449 | + |
| NHL65628.1 | 3,4-dihydroxy-2-butanone-4-phosphate synthase | 0.269809 | |

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| NHL67317.1 | PAAR domain-containing protein | 0.269129 |
| NHL66881.1 | 23S rRNA (adenine(2030)-N(6))-methyltransferase RlmJ | 0.268496 |
| NHL65242.1 | 3-oxoadipyl-CoA thiolase | 0.266624 |
| NHL68776.1 | gamma-glutamyltransferase | 0.264658 |
| NHL67227.1 | pyridoxamine 5-phosphate oxidase | 0.264402 |
| NHL64924.1 | alginate lyase family protein | 0.264261 |
| NHL67568.1 | IclR family transcriptional regulator | 0.262347 |
| NHL66566.1 | Dabb family protein | 0.261724 |
| NHL68902.1 | MBL fold metallo-hydrolase | 0.261173 |
| NHL65631.1 | bifunctional diaminohydroxyphosphoribosylaminopyrimidine deaminase | 0.260308 |
| NHL69972.1 | FAD-dependent oxidoreductase | 0.260244 |
| NHL64887.1 | FOF1 ATP synthase subunit beta | 0.258701 |
| NHL67290.1 | zinc-finger domain-containing protein | 0.257424 |
| NHL66112.1 | FAD-binding oxidoreductase | 0.254045 |
| NHL69568.1 | malate/lactate/ureidoglycolate dehydrogenase | 0.253951 |
| NHL65956.1 | transcription elongation factor GreA | 0.253347 |
| NHL68456.1 | TIGR00730 family Rossman fold protein | 0.252668 |
| NHL69962.1 | 3-oxoadipyl-CoA thiolase | 0.25243 |
| NHL65067.1 | 30S ribosomal protein S17 | 0.251847 |
| NHL65796.1 | beta-ketoacyl-ACP synthase II | 0.251695 |
| NHL65632.1 | glutamate-1-semialdehyde 2,3-aminomutase | 0.251616 |
| NHL65837.1 | FadR family transcriptional regulator | 0.250915 |
| NHL64848.1 | HU family DNA-binding protein | 0.250429 |
| NHL66467.1 | phosphoribosyltransferase | 0.250266 |
| NHL65984.1 | aldose epimerase | 0.2502 |
| NHL66900.1 | NUDIX hydrolase | 0.249992 |
| NHL70215.1 | presqualene diphosphate synthase HpND | 0.249349 |
| NHL70209.1 | ABC transporter substrate-binding protein | 0.246847 |
| NHL67098.1 | segregation/condensation protein A | 0.246259 |
| NHL67460.1 | ATP-dependent protease | 0.246122 |
| NHL70147.1 | 3-deoxy-7-phosphoheptulonate synthase | 0.245253 |
| NHL67078.1 | class I SAM-dependent methyltransferase | 0.244428 |
| NHL69953.1 | selenide, water dikinase SelD | 0.242696 |
| NHL65735.1 | electron transfer flavoprotein subunit alpha/FixB family protein | 0.2415 |
| NHL70427.1 | AAA family ATPase | 0.241269 |
| NHL65136.1 | 1-(5-phosphoribosyl)-5-[(5-phosphoribosylamino)methylideneamino]imidazole-4-carboxamide isomerase | 0.241086 |
| NHL65801.1 | DegQ family serine endopeptidase | 0.241024 |
| NHL65557.1 | dihydroorotate | 0.240445 |
| NHL67779.1 | response regulator | 0.240335 |
| NHL65281.1 | GTPase ObgE | 0.236167 |
| NHL65181.1 | type VI secretion system baseplate subunit TssG | 0.232636 |
| NHL64934.1 | DUF3396 domain-containing protein | 0.23222 |
| NHL66242.1 | NADP(H)-dependent aldo-keto reductase | 0.231487 |
| NHL68999.1 | (2Fe-2S)-binding protein | 0.230346 |
| NHL68565.1 | bifunctional tetrahydrofolate synthase/dihydrofolate synthase | 0.230334 |
| NHL66615.1 | 2-C-methyl-D-erythritol 2,4-cyclodiphosphate synthase | 0.229464 |
| NHL67277.1 | D-alanyl-D-alanine carboxypeptidase/D-alanyl-D-alanine-endopeptidase | 0.228546 |
| NHL67699.1 | ABC transporter substrate-binding protein | 0.227846 |
| NHL66667.1 | UDP-3-O-(3-hydroxymyristoyl)glucosamine N-acetyltransferase | 0.226618 |
| NHL65207.1 | Grx4 family monothiol glutaredoxin | 0.226484 |
| NHL69549.1 | adenosylmethionine decarboxylase | 0.22612 |
| NHL70507.1 | branched-chain amino acid ABC transporter substrate-binding protein | 0.224932 |
| NHL66638.1 | muramoyltetrapeptide carboxypeptidase | 0.224425 |
| NHL70053.1 | trans-2-enoyl-CoA reductase family protein | 0.222809 |
| NHL67101.1 | ParA family protein | 0.221471 |
| NHL68424.1 | FKBP-type peptidyl-prolyl cis-trans isomerase | 0.220916 |
| NHL67525.1 | glutamate-cysteine ligase | 0.220885 |
| NHL67088.1 | dCTP deaminase | 0.220234 |
| NHL66703.1 | acyl-CoA-binding protein | 0.217871 |
| NHL65666.1 | ribonuclease PH | 0.216099 |
| NHL66911.1 | NADH-quinone oxidoreductase subunit NuOE | 0.215361 |
| NHL66938.1 | Tetr/R/AcrR family transcriptional regulator | 0.214675 |
| NHL65301.1 | thiol peroxidase | 0.210206 |
| NHL65795.1 | acyl carrier protein | 0.209293 |
| NHL65248.1 | 2-polypropenyl-3-methyl-6-methoxy-1,4-benzoquinone monooxygenase | 0.207728 |
| NHL66802.1 | M3 family metallopeptidase | 0.206671 |
| NHL67405.1 | amino acid deaminase | 0.205938 |
| NHL67544.1 | lipoyl(octanoyl) transferase LipB | 0.205514 |
| NHL68517.1 | aconitase hydratase AcnA | 0.205167 |
| NHL66489.1 | protein-L-isosoapartate(D-aspartate) O-methyltransferase | 0.202945 |
| NHL65269.1 | ATP-binding protein | 0.202559 |
| NHL66429.1 | cephalosporin hydroxylase | 0.200581 |
| NHL64849.1 | bifunctional tRNA (5-methylaminomethyl-2-thiouridine)(34)-methyltransferase MnMD | 0.200222 |
| NHL68090.1 | NADP-dependent glyceraldehyde-3-phosphate dehydrogenase | 0.200138 |
| NHL64847.1 | GTP-binding protein | 0.198174 |
| NHL65035.1 | Tetr/R/AcrR family transcriptional regulator | 0.197882 |
| NHL65180.1 | type VI secretion system baseplate subunit TssF | 0.197573 |
| NHL67571.1 | 5-methyltetrahydrofolate--homocysteine methyltransferase | 0.196095 |
| NHL65773.1 | lactate utilization protein C | 0.19556 |
| NHL70886.1 | amino acid adenylation domain-containing protein | 0.195118 |
| NHL67262.1 | carbohydrate kinase | 0.194803 |
| NHL69147.1 | GMC family oxidoreductase | 0.194413 |
| NHL65690.1 | guanine deaminase | 0.193813 |
| NHL67333.1 | ferritin-like domain-containing protein | 0.193093 |
| NHL66836.1 | urocanate hydratase | 0.192765 |
| NHL70337.1 | type III secretion system outer membrane ring subunit SctC | 0.192751 |
| NHL67099.1 | pantoate-beta-alanine ligase | 0.192654 |
| NHL64970.1 | chemotaxis protein CheY | 0.192599 |
| NHL69950.1 | purine nucleoside permease | 0.192383 |
| NHL65260.1 | D-alanine-D-alanine ligase | 0.19231 |
| NHL67740.1 | DUF484 family protein | 0.192163 |
| NHL66702.1 | tRNA (adenosine(37)-N6)-threonylcarbamoyltransferase complex dimerization subunit type 1 TsAB | 0.190859 |
| NHL69963.1 | IclR family transcriptional regulator | 0.189822 |
| NHL67650.1;NHL66829.1 | glutamine synthetase | 0.187377 |
| NHL70997.1 | ATP-binding protein | 0.187239 |
| NHL69377.1 | cupin domain-containing protein | 0.185533 |
| NHL66443.1 | hypothetical protein EIB72_08595 | 0.183928 |
| NHL66454.1 | polyhydroxyalkanoate synthesis repressor PhaR | 0.183889 |

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| NHL70887.1 | LLM class flavin-dependent oxidoreductase | 0.183503 |
| NHL65347.1 | 4-hydroxy-tetrahydrodipicolinate reductase | 0.183043 |
| NHL67562.1 | D-glycero-beta-D-manno-heptose 1-phosphate adenylyltransferase | 0.180984 |
| NHL67289.1 | branched-chain amino acid transaminase | 0.177036 |
| NHL65141.1 | histidine triad nucleotide-binding protein | 0.176674 |
| NHL70883.1 | amino acid adenylation domain-containing protein | 0.17584 |
| NHL66491.1 | CoA transferase | 0.175538 |
| NHL65435.1 | DNA repair protein RecN | 0.175096 |
| NHL65734.1 | electron transfer flavoprotein subunit beta/FixA family protein | 0.174174 |
| NHL66811.1 | rhodanese-like domain-containing protein | 0.173996 |
| NHL65623.1 | UbiD family decarboxylase | 0.172305 |
| NHL65377.1 | iron-sulfur cluster insertion protein ErpA | 0.167552 |
| NHL65852.1 | aspartate aminotransferase family protein | 0.166997 |
| NHL66783.1 | Fe-S protein assembly chaperone HscA | 0.166611 |
| NHL66149.1 | hypothetical protein EIB72_07090 | 0.166239 |
| NHL66666.1 | 3-hydroxyacyl-ACP dehydratase FabZ | 0.16567 |
| NHL64853.1 | glutamine amidotransferase | 0.165338 |
| NHL70205.1 | malate synthase G | 0.165126 |
| NHL67448.1 | adenine phosphoribosyltransferase | 0.164473 |
| NHL67075.1 | fused uroporphyrinogen-III synthase HemD/membrane protein HemX | 0.16361 |
| NHL66889.1 | carboxypeptidase family protein | 0.163116 |
| NHL65653.1 | septum site-determining protein MinC | 0.162478 |
| NHL67822.1 | ribonuclease P protein component | 0.162358 |
| NHL67135.1 | ABC transporter substrate-binding protein | 0.158883 |
| NHL67686.1 | glutathione S-transferase family protein | 0.158435 |
| NHL66310.1 | AAA domain-containing protein | 0.155239 |
| NHL67234.1 | Lrp/AsnC family transcriptional regulator | 0.155078 |
| NHL65227.1 | M61 family metallopeptidase | 0.154167 |
| NHL69045.1 | phosphoenolpyruvate carboxykinase (GTP) | 0.153126 |
| NHL71015.1 | malto-oligosyltrehalose synthase | 0.15296 |
| NHL66264.1 | ribokinase | 0.152482 |
| NHL70008.1 | glucose-6-phosphate dehydrogenase | 0.151818 |
| NHL64936.1 | PAAR domain-containing protein | 0.150957 |
| NHL69519.1 | GNAT family N-acetyltransferase | 0.150675 |
| NHL67791.1 | D-2-hydroxyacid dehydrogenase family protein | 0.149448 |
| NHL66675.1 | UMP kinase | 0.148904 |
| NHL67582.1 | bifunctional isocitrate dehydrogenase kinase/phosphatase | 0.148486 |
| NHL70408.1 | TetR/AcrR family transcriptional regulator | 0.148443 |
| NHL65553.1 | YggE/AlgH family protein | 0.146952 |
| NHL68437.1 | HAMP domain-containing histidine kinase | 0.146928 |
| NHL65215.1 | HAD-IA family hydrolase | 0.146156 |
| NHL66917.1 | triose-phosphate isomerase | 0.145363 |
| NHL67702.1 | NAD(P)/FAD-dependent oxidoreductase | 0.142988 |
| NHL66765.1 | Hsp33 family molecular chaperone HsIO | 0.14227 |
| NHL65119.1 | thiamine phosphate synthase | 0.142194 |
| NHL65784.1 | HAD-IA family hydrolase | 0.139421 |
| NHL65676.1 | chorismate mutase | 0.13857 |
| NHL65042.1 | SGNH/GDSL hydrolase family protein | 0.13785 |
| NHL65062.1 | 30S ribosomal protein S19 | 0.137681 |
| NHL71123.1 | hypothetical protein EIB72_32620 | 0.13716 |
| NHL70457.1 | ProQ activator of osmoprotectant transporter prop | 0.134538 |
| NHL66782.1 | ISC system 2Fe-2S type ferredoxin | 0.134375 |
| NHL68555.1 | 3-isopropylmalate dehydrogenase | 0.132494 |
| NHL70213.1 | squalene–hopene cyclase | 0.130404 |
| NHL64894.1 | branched-chain amino acid ABC transporter substrate-binding protein | 0.129061 |
| NHL70681.1 | antibiotic biosynthesis monooxygenase | 0.127913 |
| NHL67065.1 | NAD+ synthase | 0.127774 |
| NHL65856.1 | N-succinylarginine dihydrolase | 0.126689 |
| NHL71098.1 | sel1 repeat family protein | 0.123917 |
| NHL70426.1 | bifunctional (p)ppGpp synthetase/guanosine-3,5-bis(diphosphate) 3-pyrophosphohydrolase | 0.123535 |
| NHL64884.1 | F0F1 ATP synthase subunit delta | 0.1221 + |
| NHL67005.1 | spermidine synthase | 0.121634 |
| NHL67808.1 | glutamate–cysteine ligase | 0.121384 |
| NHL66925.1 | 2-isopropylmalate synthase | 0.119937 |
| NHL65665.1 | RdgB/HAM1 family non-canonical purine NTP pyrophosphatase | 0.118066 |
| NHL66206.1 | ribonuclease R | 0.117802 |
| NHL70136.1 | 4-hydroxy-3-methylbut-2-enyl diphosphate reductase | 0.116819 |
| NHL65644.1 | thioredoxin-disulfide reductase | 0.116599 |
| NHL70073.1 | low-specificity L-threonine aldolase | 0.114548 |
| NHL66956.1 | methylglyoxal synthase | 0.11412 |
| NHL65364.1 | Glu/Leu/Phe/Val dehydrogenase | 0.113158 |
| NHL68454.1 | AMP nucleosidase | 0.112113 |
| NHL65523.1 | alanine–glyoxylate aminotransferase family protein | 0.111725 |
| NHL65278.1 | octaprenyl diphosphate synthase | 0.110161 |
| NHL65958.1 | YhbY family RNA-binding protein | 0.10857 |
| NHL67737.1 | methionine adenosyltransferase | 0.10773 |
| NHL70026.1 | succinylglutamate desuccinylase/aspartoacylase family protein | 0.107541 |
| NHL67565.1 | alginate biosynthesis protein AlgP | 0.106565 |
| NHL64878.1 | ParB/RepB/SpoOJ family partition protein | 0.106462 |
| NHL68977.1 | UDP-N-acetylglucosamine 1-carboxyvinyltransferase | 0.106284 |
| NHL65289.1 | signal recognition particle protein | 0.103008 |
| NHL67811.1 | VOC family protein | 0.10272 |
| NHL66627.1 | LysR family transcriptional regulator | 0.102582 |
| NHL65490.1 | tol-pal system protein YbgF | 0.102102 |
| NHL65674.1 | cold-shock protein | 0.101539 |
| NHL66450.1 | 30S ribosomal protein S12 methylthiotransferase RimO | 0.10061 |
| NHL70875.1 | PhzF family phenazine biosynthesis protein | 0.10018 |
| NHL67038.1 | SDR family NAD(P)-dependent oxidoreductase | 0.0999775 |
| NHL66589.1 | glucose-6-phosphate isomerase | 0.0990925 |
| NHL66143.1 | integration host factor subunit alpha | 0.0980123 |
| NHL68151.1 | hypothetical protein EIB72_17370 | 0.0972468 |
| NHL66885.1 | DUF2863 family protein | 0.0965436 |
| NHL68723.1 | phosphoenolpyruvate mutase | 0.0953318 |
| NHL66987.1 | DNA translocase FtsK | 0.0952911 |
| NHL66966.1 | ribonuclease G | 0.0949542 |
| NHL65447.1 | deoxyribonucleoside kinase | 0.0934315 |
| NHL71144.1 | alpha/beta hydrolase | 0.0929896 |
| NHL68922.1 | VOC family protein | 0.0929712 |

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| NHL65463.1 | polysialic acid transporter | 0.090203 |
| NHL65753.1 | metalloprotease PmbA | 0.0899118 |
| NHL64883.1 | FOF1 ATP synthase subunit B | 0.0898018 |
| NHL66254.1 | transcriptional repressor LexA | 0.0896263 |
| NHL67054.1 | response regulator | 0.0895627 |
| NHL69404.1 | porin | 0.0888462 |
| NHL65156.1 | hypothetical protein EIB72_01950 | 0.0878677 |
| NHL66923.1 | carbonic anhydrase | 0.0867589 |
| NHL67454.1 | LPS export ABC transporter ATP-binding protein | 0.0867316 |
| NHL67226.1 | tRNA cyclic N6-threonylcarbamoyladenosine(37) synthase TcdA | 0.0863679 |
| NHL67130.1 | sulfatase adenylyltransferase subunit CysD | 0.086319 |
| NHL65771.1 | ferredoxin family protein | 0.0841993 |
| NHL67496.1 | hypothetical protein EIB72_14035 | 0.0837936 |
| NHL66137.1 | threonine-tRNA ligase | 0.0833988 |
| NHL66942.1 | DUF924 domain-containing protein | 0.0828679 |
| NHL67061.1 | GNAT family N-acetyltransferase | 0.0816256 |
| NHL66991.1 | TetrR/AcrR family transcriptional regulator | 0.0814546 |
| NHL65131.1 | histidinol dehydrogenase | 0.0807775 |
| NHL65059.1 | 50S ribosomal protein L4 | 0.0791734 |
| NHL67403.1 | D-aminoacylase | 0.0784537 |
| NHL66093.1 | sulfurtransferase TusA family protein | 0.0784467 |
| NHL67174.1 | ATP-dependent Clp protease ATP-binding subunit ClpA | 0.0772896 |
| NHL68399.1 | DUF883 domain-containing protein | 0.0767899 |
| NHL67465.1 | 4-(cytidine 5-diphospho)-2-C-methyl-D-erythritol kinase | 0.0753384 |
| NHL65254.1 | UDP-N-acetylglucosamine-4-epimerase | 0.0737279 |
| NHL66233.1 | DUF695 domain-containing protein | 0.0736694 |
| NHL67180.1 | NADP-dependent isocitrate dehydrogenase | 0.0733674 |
| NHL68521.1 | malate dehydrogenase | 0.0726109 |
| NHL68519.1 | hypothetical protein EIB72_19240 | 0.0719859 |
| NHL66695.1 | DNA repair protein RadA | 0.071387 |
| NHL66681.1 | peptide deformylase | 0.0692418 |
| NHL65359.1 | gluconokinase | 0.0663287 |
| NHL66521.1 | pyridoxal phosphate-dependent aminotransferase | 0.0644213 |
| NHL65279.1 | 50S ribosomal protein L21 | 0.0636562 |
| NHL66800.1 | response regulator transcription factor | 0.0617657 |
| NHL65636.1 | 6-phosphogluconolactonase | 0.0600501 |
| NHL64955.1 | Cof-type HAD-IIB family hydrolase | 0.05959 |
| NHL67766.1 | Asp-tRNA(Asn)/Glu-tRNA(Gln) amidotransferase subunit GatB | 0.0574805 |
| NHL65508.1 | peroxiredoxin | 0.0572751 |
| NHL68009.1 | response regulator | 0.0572573 |
| NHL66909.1 | NADH-quinone oxidoreductase subunit G | 0.0571327 |
| NHL66023.1 | hypothetical protein EIB72_06445 | 0.0569331 |
| NHL66752.1 | cupin domain-containing protein | 0.0565866 |
| NHL67127.1 | cobalamin biosynthesis protein CbiX | 0.0544872 |
| NHL65509.1 | acyl-CoA dehydrogenase | 0.054011 |
| NHL71099.1 | phospholipase | 0.0527623 |
| NHL65088.1 | porphobilinogen synthase | 0.0512269 |
| NHL65084.1 | DNA-directed RNA polymerase subunit alpha | 0.0492433 |
| NHL67956.1 | ATP-dependent RNA helicase DbpA | 0.0474701 |
| NHL67476.1 | 2-isopropylmalate synthase | 0.0472056 |
| NHL65130.1 | ATP phosphoribosyltransferase | 0.0471821 |
| NHL67120.1 | dihydroxy-acid dehydratase | 0.046025 |
| NHL66136.1 | bifunctional (p)ppGpp synthetase/guanosine-3,5-bis(diphosphate) 3-pyrophosphohydrolase | 0.0452957 |
| NHL66828.1 | aspartate aminotransferase family protein | 0.0450026 |
| NHL68561.1 | tryptophan synthase subunit beta | 0.0447521 |
| NHL69523.1 | DUF4142 domain-containing protein | 0.0440038 |
| NHL65191.1 | phage tail protein | 0.0431169 |
| NHL67935.1 | phosphotransferase | 0.0428727 |
| NHL66477.1 | tetratricopeptide repeat protein | 0.0416997 |
| NHL67436.1 | acetoadetyl-CoA reductase | 0.0405229 |
| NHL66758.1 | tryptophan-tRNA ligase | 0.0402991 |
| NHL66565.1 | PaaI family thioesterase | 0.0400155 |
| NHL65752.1 | ribosome-associated protein | 0.039004 |
| NHL67152.1 | ABC transporter ATP-binding protein | 0.0376301 |
| NHL70054.1 | SDR family oxidoreductase | 0.0351779 |
| NHL65112.1 | glutamate synthase subunit beta | 0.0326678 |
| NHL65727.1 | cysteine synthase CysM | 0.0321916 |
| NHL70412.1 | aromatic ring-hydroxylating dioxygenase subunit alpha | 0.0321369 |
| NHL71078.1 | response regulator | 0.0298856 |
| NHL67214.1 | YajQ family cyclic di-GMP-binding protein | 0.0294253 |
| NHL68835.1 | homoprotocatechuate degradation operon regulator HpaR | 0.0290521 |
| NHL66913.1 | NADH-quinone oxidoreductase subunit C | 0.0290508 |
| NHL66592.1 | peptidylprolyl isomerase | 0.0283025 |
| NHL67637.1 | UDP-N-acetylglucosamine diphosphorylase/glucosamine-1-phosphate N-acetyltransferase | 0.0281321 |
| NHL65259.1 | UDP-N-acetylumuramate-L-alanine ligase | 0.0270596 |
| NHL65534.1 | BON domain-containing protein | 0.0248775 |
| NHL67524.1 | glutathione synthase | 0.0234038 |
| NHL67040.1 | serine protease inhibitor ecatin | 0.0232499 |
| NHL68522.1 | GntR family transcriptional regulator | 0.0222289 |
| NHL68452.1 | homoserine kinase | 0.0214895 |
| NHL67310.1 | response regulator transcription factor | 0.0200704 |
| NHL69753.1 | ABC transporter ATP-binding protein | 0.0199598 |
| NHL70041.1 | hypothetical protein EIB72_27065 | 0.0185127 |
| NHL68523.1 | succinate dehydrogenase, cytochrome b566 subunit | 0.0181777 |
| NHL65492.1 | Tol-Pal system protein TolB | 0.0178668 |
| NHL71134.1 | tetratricopeptide repeat protein | 0.0162875 |
| NHL66048.1 | pirin family protein | 0.0156562 |
| NHL66158.1 | ribosome maturation factor RimP | 0.015426 |
| NHL70145.1 | carbon starvation protein A | 0.0150312 |
| NHL67400.1 | threonine ammonia-lyase, biosynthetic | 0.0131512 |
| NHL66988.1 | lactonase family protein | 0.0118306 |
| NHL67206.1 | adenylate kinase | 0.0111675 |
| NHL66125.1 | SDR family oxidoreductase | 0.0110836 |
| NHL65775.1 | D-glycerate dehydrogenase | 0.00926526 |
| NHL66016.1 | NADPH:quinone oxidoreductase family protein | 0.00875473 |
| NHL67834.1 | arsenate reductase (glutaredoxin) | 0.00847371 |
| NHL66665.1 | acyl-ACP-UDP-N-acetylglucosamine O-acyltransferase | 0.00709597 |
| NHL66785.1 | iron-sulfur cluster assembly protein Isca | 0.0066452 |

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| NHL66525.1 | DegT/DnrJ/EryC1/StrS aminotransferase family protein | 0.00524584 |
| NHL65155.1 | RHS repeat protein | 0.00345039 |
| NHL66735.1 | tRNA lysidine(34) synthetase TlIS | 0.00330162 |
| NHL66554.1 | hypothetical protein EIB72_09160 | 0.00318782 |
| NHL67011.1 | VOC family protein | 0.00125821 |
| NHL69966.1 | alkene reductase | 0.000808716 |
| NHL64808.1 | ergothioneine biosynthesis protein EgtB | 0 |
| NHL64845.1 | type II secretion system secretin GspD | 0 |
| NHL64900.1 | ABC transporter substrate-binding protein | 0 |
| NHL64951.1 | flagellin | 0 |
| NHL64965.1 | chemotaxis protein CheW | 0 |
| NHL64980.1 | RNA polymerase sigma factor FliA | 0 |
| NHL64993.1 | exonuclease | 0 |
| NHL65036.1 | DUF1835 domain-containing protein | 0 |
| NHL65109.1 | OmpW family protein | 0 |
| NHL65125.1 | STAS domain-containing protein | 0 |
| NHL65214.1 | cysteine hydrolase | 0 |
| NHL65238.1 | murein transglycosylase | 0 |
| NHL65239.1 | phenylacetate-CoA ligase | 0 |
| NHL65308.1 | UDP-N-acetylglucosamine-4-epimerase | 0 |
| NHL65329.1 | thiamine-phosphate kinase | 0 |
| NHL65363.1 | LysR family transcriptional regulator | 0 |
| NHL65468.1 | hypothetical protein EIB72_03540 | 0 |
| NHL65488.1 | glycosyltransferase family 1 protein | 0 |
| NHL65496.1 | tol-pal system-associated acyl-CoA thioesterase | 0 |
| NHL65648.1 | DUF2164 domain-containing protein | 0 |
| NHL65701.1 | FAD-binding monooxygenase | 0 |
| NHL65702.1 | formate dehydrogenase subunit delta | 0 |
| NHL65777.1 | GNAT family N-acetyltransferase | 0 |
| NHL65791.1 | phosphate acyltransferase PtsX | 0 |
| NHL65822.1 | type I methionyl aminopeptidase | 0 |
| NHL65870.1 | alpha/beta hydrolase | 0 |
| NHL65875.1 | Rrf2 family transcriptional regulator | 0 |
| NHL65905.1 | substrate-binding domain-containing protein | 0 |
| NHL65982.1 | AMP-binding protein | 0 |
| NHL65983.1 | peptidoglycan DD-metalloendopeptidase family protein | 0 |
| NHL66009.1 | ABC transporter substrate-binding protein | 0 |
| NHL66044.1 | cellulose synthase operon protein YhjQ | 0 |
| NHL66067.1 | CoA transferase | 0 |
| NHL66118.1 | MFS transporter | 0 |
| NHL66151.1 | hypothetical protein EIB72_07100 | 0 |
| NHL66162.1 | tRNA pseudouridine(5S) synthase TruB | 0 |
| NHL66166.1 | MarR family transcriptional regulator | 0 |
| NHL66241.1 | PaaI family thioesterase | 0 |
| NHL66271.1 | ABC transporter substrate-binding protein | 0 |
| NHL66276.1 | MexX/AxyX family multidrug efflux RND transporter periplasmic adaptor subunit | 0 |
| NHL66302.1 | hypothetical protein EIB72_07880 | 0 |
| NHL66307.1 | uroporphyrinogen-III C-methyltransferase | 0 |
| NHL66341.1 | extracellular solute-binding protein | 0 |
| NHL66346.1 | ABC transporter substrate-binding protein | 0 |
| NHL66347.1 | response regulator | 0 |
| NHL66348.1 | EAL domain-containing protein | 0 |
| NHL66361.1 | MarR family transcriptional regulator | 0 |
| NHL66362.1 | GNAT family N-acetyltransferase | 0 |
| NHL66448.1 | hypothetical protein EIB72_08620 | 0 |
| NHL66492.1 | recombination protein RecR | 0 |
| NHL66514.1 | Rrf2 family transcriptional regulator | 0 |
| NHL66538.1 | primosomal replication protein N | 0 |
| NHL66547.1 | asparaginase | 0 |
| NHL66548.1 | phosphate starvation-inducible protein PsiF | 0 |
| NHL66619.1 | threonine/serine dehydratase | 0 |
| NHL66655.1 | RnfH family protein | 0 |
| NHL66706.1 | universal stress protein | 0 |
| NHL66710.1 | gamma-glutamylcyclotransferase | 0 |
| NHL66763.1 | ferritin-like domain-containing protein | 0 |
| NHL66809.1 | PAS domain-containing sensor histidine kinase | 0 |
| NHL66867.1 | Mota/TolQ/ExbB proton channel family protein | 0 |
| NHL66870.1 | pirin family protein | 0 |
| NHL66884.1 | Cu(I)-responsive transcriptional regulator | 0 |
| NHL66886.1 | response regulator transcription factor | 0 |
| NHL66897.1 | MaoC family dehydratase | 0 |
| NHL66992.1 | electron transport complex subunit RsbX | 0 |
| NHL66993.1 | endonuclease III | 0 |
| NHL67010.1 | PLP-dependent aminotransferase family protein | 0 |
| NHL67016.1 | PhzF family phenazine biosynthesis protein | 0 |
| NHL67066.1 | N-acetyltransferase | 0 |
| NHL67079.1 | helix-turn-helix domain-containing protein | 0 |
| NHL67118.1 | prolipoprotein diacylglycerol transferase | 0 |
| NHL67181.1 | pseudouridine synthase | 0 |
| NHL67245.1 | sugar-binding transcriptional regulator | 0 |
| NHL67272.1 | DUF427 domain-containing protein | 0 |
| NHL67279.1 | acylhydrolase | 0 |
| NHL67294.1 | DUF2946 family protein | 0 |
| NHL67307.1 | DUF2889 domain-containing protein | 0 |
| NHL67429.1 | MMPL family transporter | 0 |
| NHL67462.1 | bifunctional DNA-formamidopyrimidine glycosylase/DNA-(apurinic or apyrimidinic site) lyase | 0 |
| NHL67507.1 | cytochrome c oxidase subunit I | 0 |
| NHL67512.1 | tRNA (uridine(34)/cytosine(34)/5-carboxymethylaminomethyluridine(34)-2-O)-methyltransferase | 0 |
| NHL67527.1 | P-II family nitrogen regulator | 0 |
| NHL67532.1 | sigma-54-dependent Fis family transcriptional regulator | 0 |
| NHL67617.1 | YbaK/EbsC family protein | 0 |
| NHL67630.1:NHL66200.1 | carbohydrate kinase | 0 |
| NHL67633.1 | class I SAM-dependent methyltransferase | 0 |
| NHL67634.1 | SDR family oxidoreductase | 0 |
| NHL67689.1 | 5-formyltetrahydrofolate cyclo-ligase | 0 |
| NHL67693.1 | 5-oxoprolinase subunit PxpA | 0 |
| NHL67704.1 | hypothetical protein EIB72_15075 | 0 |
| NHL67761.1 | M48 family metallopeptidase | 0 |

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| NHL67841.1 | DUF2471 domain-containing protein | 0 |
| NHL67887.1 | SDR family oxidoreductase | 0 |
| NHL67949.1 | LysR family transcriptional regulator | 0 |
| NHL68004.1 | two-component system response regulator | 0 |
| NHL68023.1 | DUF3422 domain-containing protein | 0 |
| NHL68099.1 | FAD-binding oxidoreductase | 0 |
| NHL68183.1 | hypothetical protein EIB72_17530 | 0 |
| NHL68245.1 | hypothetical protein EIB72_17840 | 0 |
| NHL68359.1 | type VI secretion system baseplate subunit TssF | 0 |
| NHL68379.1 | methyl-accepting chemotaxis protein | 0 |
| NHL68398.1 | hypothetical protein EIB72_18630 | 0 |
| NHL68410.1 | mannose-1-phosphate guanylyltransferase/mannose-6-phosphate isomerase | 0 |
| NHL68412.1 | UDP-glucose/GDP-mannose dehydrogenase family protein | 0 |
| NHL68428.1 | DUF2384 domain-containing protein | 0 |
| NHL68754.1 | glycoside hydrolase family 31 protein | 0 |
| NHL68774.1 | DEAD/DEAH box helicase | 0 |
| NHL68780.1 | beta-ketoacyl synthase chain length factor | 0 |
| NHL68793.1 | 3-oxoacyl-ACP reductase FabG | 0 |
| NHL68882.1 | LacI family DNA-binding transcriptional regulator | 0 |
| NHL68975.1 | helix-turn-helix domain-containing protein | 0 |
| NHL68996.1 | TetR/AcrR family transcriptional regulator | 0 |
| NHL69061.1 | translation initiation factor IF-1 | 0 |
| NHL69144.1 | porin | 0 |
| NHL69168.1 | D-alanyl-D-alanine endopeptidase | 0 |
| NHL69351.1 | carbamate kinase | 0 |
| NHL69359.1 | amidase | 0 |
| NHL69389.1 | FUSC family protein | 0 |
| NHL69426.1 | amidohydrolase family protein | 0 |
| NHL69457.1 | dihydrodipicolinate reductase | 0 |
| NHL69463.1 | entericidin A/B family lipoprotein | 0 |
| NHL69488.1 | xanthine dehydrogenase family protein molybdopterin-binding subunit | 0 |
| NHL69538.1 | lysozyme | 0 |
| NHL69574.1 | rhodanese-like domain-containing protein | 0 |
| NHL69670.1 | FAD-binding oxidoreductase | 0 |
| NHL69718.1 | autoinducer 2 ABC transporter substrate-binding protein | 0 |
| NHL69721.1 | glycine betaine ABC transporter substrate-binding protein | 0 |
| NHL69769.1 | 2-hydroxyacid dehydrogenase | 0 |
| NHL69774.1 | lytic transglycosylase domain-containing protein | 0 |
| NHL69836.1 | mannitol dehydrogenase family protein | 0 |
| NHL69848.1 | FMN-binding negative transcriptional regulator | 0 |
| NHL69902.1 | shikimate dehydrogenase | 0 |
| NHL69932.1 | DUF3579 domain-containing protein | 0 |
| NHL70005.1 | peroxidase-related enzyme | 0 |
| NHL70013.1 | 2,5-didehydrogluconate reductase DkgB | 0 |
| NHL70055.1 | TetR/AcrR family transcriptional regulator | 0 |
| NHL70065.1 | 2-hydroxychromene-2-carboxylate isomerase | 0 |
| NHL70112.1 | thioredoxin family protein | 0 |
| NHL70128.1 | acylphosphatase | 0 |
| NHL70141.1 | DOPA 4,5-dioxygenase family protein | 0 |
| NHL70208.1 | response regulator transcription factor | 0 |
| NHL70233.1 | LysR family transcriptional regulator | 0 |
| NHL70235.1 | Re/Si-specific NAD(P)(+)-transhydrogenase subunit alpha | 0 |
| NHL70279.1 | helix-turn-helix transcriptional regulator | 0 |
| NHL70335.1 | response regulator transcription factor | 0 |
| NHL70374.1 | helix-turn-helix transcriptional regulator | 0 |
| NHL70397.1;NHL70401.1 | DUF1348 family protein | 0 |
| NHL70505.1 | thioesterase | 0 |
| NHL70526.1 | hypothetical protein EIB72_29565 | 0 |
| NHL70565.1 | hypothetical protein EIB72_29780 | 0 |
| NHL70725.1 | hypothetical protein EIB72_30580 | 0 |
| NHL70740.1 | D-xylene ABC transporter ATP-binding protein | 0 |
| NHL70768.1 | amidohydrolase | 0 |
| NHL70841.1 | oxidoreductase | 0 |
| NHL70926.1 | LysR family transcriptional regulator | 0 |
| NHL70950.1 | TauD/TfdA family dioxygenase | 0 |
| NHL70994.1 | catechol 1,2-dioxygenase | 0 |
| NHL71008.1 | DUF2591 family protein | 0 |
| NHL71021.1 | phosphatidylserine decarboxylase family protein | 0 |
| NHL71024.1 | type 1 glutamine amidotransferase | 0 |
| NHL71108.1 | molybdopterin molybdotransferase MoeA | 0 |
| NHL71172.1 | TetR family transcriptional regulator | 0 |
| NHL71174.1 | molybdopterin-dependent oxidoreductase | 0 |
| NHL68566.1;REV_NHL68566.1 | sporulation protein | -1.84E-05 |
| NHL67670.1 | flagellar brake protein | -0.00150108 |
| NHL67597.1 | glutathione S-transferase | -0.00321325 |
| NHL69884.1 | 5-methyltetrahydropteroyltriglutamate--homocysteine S-methyltransferase | -0.00619062 |
| NHL67765.1 | polyphosphate kinase 2 family protein | -0.00623067 |
| NHL66910.1 | NADH-quinone oxidoreductase subunit NuqF | -0.0068442 |
| NHL69556.1 | N-acetyl muramoyl-L-alanine amidase | -0.00727336 |
| NHL70888.1 | AMP-binding protein | -0.00891622 |
| NHL69790.1 | SDR family oxidoreductase | -0.00925255 |
| NHL65173.1 | type VI secretion system baseplate subunit TssK | -0.0100047 |
| NHL66996.1 | cytochrome c | -0.0104968 |
| NHL66797.1 | dihydropolylysine-residue acetyltransferase | -0.0105515 |
| NHL65303.1 | 50S ribosomal protein L11 methyltransferase | -0.0108185 |
| NHL65805.1 | ribonuclease III | -0.0110137 |
| NHL66919.1 | polyribonucleotide nucleotidyltransferase | -0.0115636 |
| NHL67299.1 | glycosyl hydrolase | -0.0135746 |
| NHL65268.1 | bifunctional glutamate N-acetyltransferase/amino-acid acetyltransferase ArgJ | -0.0138022 |
| NHL69049.1 | threo-3-hydroxy-L-aspartate ammonia-lyase | -0.0139701 |
| NHL67886.1 | serine acetyltransferase | -0.0145976 |
| NHL65000.1 | c-type cytochrome | -0.0160516 |
| NHL65521.1 | LysR family transcriptional regulator | -0.0162309 |
| NHL67858.1 | siderophore-interacting protein | -0.0180047 |
| NHL67156.1 | 4-hydroxy-3-methylbut-2-enyl diphosphate reductase | -0.018638 |
| NHL70758.1 | ABC transporter substrate-binding protein | -0.0188039 |
| NHL65079.1 | translation initiation factor IF-1 | -0.0189355 |
| NHL65436.1 | NAD kinase | -0.0198275 |

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| NHL69664.1 | type VI secretion system tip protein VgrG | -0.0198797 |
| NHL65831.1 | alpha, alpha-trehalose-phosphate synthase (UDP-forming) | -0.0203603 |
| NHL65118.1 | thiazole synthase | -0.0223554 |
| NHL65325.1 | orotidine-5'-phosphate decarboxylase | -0.0230948 |
| NHL65025.1 | N-acetyl-gamma-glutamyl-phosphate reductase | -0.0235551 |
| NHL70668.1 | lipase | -0.0245266 |
| NHL66535.1 | replicative DNA helicase | -0.0250435 |
| NHL66616.1 | 2-C-methyl-D-erythritol 4-phosphate cytidylyltransferase | -0.0264702 |
| NHL65868.1 | IclR family transcriptional regulator | -0.0265942 |
| NHL66690.1 | 50S ribosomal protein L3 (N(S)-glutamine methyltransferase | -0.027689 |
| NHL65183.1 | type VI secretion system protein TssA | -0.0280043 |
| NHL66810.1 | type I glutamate-ammonia ligase | -0.0298773 |
| NHL64875.1 | tRNA uridine-5-carboxymethylaminomethyl(34) synthesis enzyme MnmG | -0.0306358 |
| NHL67789.1 | DNA topoisomerase III | -0.0309989 |
| NHL66558.1 | dTMP kinase | -0.0313104 |
| NHL69991.1 | TetR/AcrR family transcriptional regulator | -0.0316188 |
| NHL66756.1 | 4-hydroxy-tetrahydrodipicolinate synthase | -0.0317205 |
| NHL66480.1 | DUF4115 domain-containing protein | -0.0320352 |
| NHL65188.1 | type VI secretion system-associated protein TagF | -0.0333443 |
| NHL67370.1 | 4-hydroxythreonine-4-phosphate dehydrogenase PdxA | -0.0339457 |
| NHL64829.1 | LysR family transcriptional regulator | -0.0340405 |
| NHL65421.1 | YggS family pyridoxal phosphate-dependent enzyme | -0.0365473 |
| NHL67286.1 | phosphoglycerate kinase | -0.0375341 |
| NHL67548.1 | D-amino acid aminotransferase | -0.0383968 |
| NHL66816.1 | ATP-dependent RNA helicase HrpA | -0.0391998 |
| NHL65764.1 | RNA-binding S4 domain-containing protein | -0.0397441 |
| NHL67055.1 | periplasmic heavy metal sensor | -0.0400244 |
| NHL66447.1 | cystathione beta-lyase | -0.0417811 |
| NHL66267.1 | Yeah/YhbH family protein | -0.0419706 |
| NHL66436.1 | hypothetical protein EIB72_08560 | -0.042476 |
| NHL65246.1 | long-chain fatty acid-CoA ligase | -0.0428619 |
| NHL65757.1 | thymidylate synthase | -0.043642 |
| NHL70058.1 | SRPBCC family protein | -0.0440362 |
| NHL66676.1 | elongation factor Ts | -0.0448036 |
| NHL65948.1 | ribonuclease HI | -0.0448074 |
| NHL65724.1 | D-glycero-beta-D-manno-heptose-7-phosphate kinase | -0.0454795 |
| NHL67519.1 | S41 family peptidase | -0.0459747 |
| NHL66760.1 | threonylcarbamoyl-AMP synthase | -0.0464001 |
| NHL69316.1 | SDR family oxidoreductase | -0.0467682 |
| NHL65560.1 | dTDP-glucose 4,6-dehydratase | -0.0469125 |
| NHL65373.1 | OsmC family protein | -0.047212 |
| NHL66818.1 | oxidative damage protection protein | -0.047397 |
| NHL65813.1 | elongation factor P maturation arginine rhinosyltransferase EarP | -0.0475038 |
| NHL70970.1 | GNAT family N-acetyltransferase | -0.0476322 |
| NHL65389.1 | UbiH/UbiF/VisC/COQ6 family ubiquinone biosynthesis hydroxylase | -0.0492859 |
| NHL68957.1 | universal stress protein | -0.0521768 |
| NHL71119.1:NHL67781.1 | DUF4132 domain-containing protein | -0.052927 |
| NHL65491.1 | peptidoglycan-associated lipoprotein Pal | -0.053257 |
| NHL69130.1 | pyrimidine/purine nucleoside phosphorylase | -0.0534611 |
| NHL65135.1 | imidazole glycerol phosphate synthase subunit HisH | -0.0551135 |
| NHL67090.1 | iron-sulfur cluster carrier protein ApbC | -0.0554167 |
| NHL67836.1 | AAA family ATPase | -0.0576178 |
| NHL67329.1 | c-type cytochrome | -0.0579274 |
| NHL67076.1 | hydroxymethylbilane synthase | -0.0604769 |
| NHL69915.1 | hypothetical protein EIB72_26430 | -0.0609926 |
| NHL65635.1 | bifunctional transcriptional regulator/glucokinase | -0.063268 |
| NHL66539.1 | 30S ribosomal protein S6 | -0.0638371 |
| NHL66972.1 | RcnB family protein | -0.0640729 |
| NHL67163.1 | quinolinate synthase NadA | -0.0651099 |
| NHL69823.1 | isovaleryl-CoA dehydrogenase | -0.0664934 |
| NHL65466.1 | glycosyltransferase | -0.0668659 |
| NHL66126.1 | acyl-CoA thioesterase | -0.067009 |
| NHL71120.1 | ATP-dependent Clp protease ATP-binding subunit | -0.0671374 |
| NHL67441.1 | single-stranded DNA-binding protein | -0.0673618 |
| NHL67150.1 | YukJ family protein | -0.0676702 |
| NHL65728.1 | lytic murein transglycosylase B | -0.0689437 |
| NHL70537.1 | H-NS histone family protein | -0.0692997 |
| NHL65406.1 | Ycel family protein | -0.0729733 |
| NHL68554.1 | 3-isopropylmalate dehydratase small subunit | -0.0754662 |
| NHL67508.1 | cytochrome c oxidase subunit II | -0.0763454 |
| NHL67825.1 | DNA polymerase III subunit beta | -0.0766017 |
| NHL70151.1 | SDR family oxidoreductase | -0.0774905 |
| NHL65053.1 | 30S ribosomal protein S12 | -0.0775286 |
| NHL67014.1 | PLP-dependent aminotransferase family protein | -0.0777016 |
| NHL66095.1 | response regulator transcription factor | -0.0782077 |
| NHL65449.1 | polynucleotide adenylyltransferase PcnB | -0.0799115 |
| NHL65598.1 | sulfurtransferase | -0.0802816 |
| NHL65670.1 | bifunctional (p)ppGpp synthetase/guanosine-3,5-bis(diphosphate) 3-pyrophosphohydrolase | -0.0803413 |
| NHL68979.1 | 4-hydroxyphenylpyruvate dioxygenase | -0.0805162 |
| NHL65793.1 | ACP S-malonyltransferase | -0.0806891 |
| NHL65792.1 | ketoacyl-ACP synthase III | -0.0821114 |
| NHL65056.1:NHL65043.1 | elongation factor Tu | -0.082798 |
| NHL66594.1 | ATP-dependent Clp protease ATP-binding subunit ClpX | -0.0832609 |
| NHL66528.1 | bifunctional UDP-4-keto-pentose/UDP-xylene synthase | -0.0836646 |
| NHL69866.1 | aldehyde dehydrogenase family protein | -0.0853151 |
| NHL70377.1 | alpha/beta hydrolase | -0.0859636 |
| NHL65712.1 | DNA gyrase subunit A | -0.0867106 |
| NHL65748.1 | ribosome small subunit-dependent GTPase A | -0.088953 |
| NHL65189.1 | type VI secretion system membrane subunit TssM | -0.0893822 |
| NHL68760.1 | glutathione ABC transporter substrate-binding protein GsiB | -0.0907307 |
| NHL71012.1 | glycogen debranching protein GlgK | -0.0914815 |
| NHL70184.1 | arabinose ABC transporter substrate-binding protein | -0.0922629 |
| NHL67578.1 | ABC transporter substrate-binding protein | -0.0927162 |
| NHL65415.1 | hydrogen peroxide-inducible genes activator | -0.0936546 |
| NHL69146.1 | c-type cytochrome | -0.0939649 |
| NHL69808.1 | NIPSNAP family protein | -0.0942453 |
| NHL70884.1 | amino acid adenylation domain-containing protein | -0.0952619 |
| NHL67819.1 | helix-turn-helix transcriptional regulator | -0.095705 |

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| NHL66064.1 | glutamine-tRNA ligase/YqeY domain fusion protein | -0.0958576 |
| NHL66975.1 | glycosyltransferase | -0.0962613 |
| NHL66460.1 | RlxA family pseudouridine synthase | -0.0970014 |
| NHL66957.1 | SDR family oxidoreductase | -0.0978305 |
| NHL65794.1 | 3-oxoacyl-ACP reductase FabG | -0.0983868 |
| NHL66660.1 | phosphoenolpyruvate synthase | -0.0990766 |
| NHL66737.1 | DNA-3-methyladenine glycosylase 2 family protein | -0.101375 |
| NHL65216.1 | energy-dependent translational throttle protein EttA | -0.10151 |
| NHL65714.1 | 3-phosphoserine/phosphohydroxythreonine transaminase | -0.102146 |
| NHL70407.1 | organic hydroperoxide resistance protein | -0.104961 |
| NHL70166.1 | GNAT family N-acetyltransferase | -0.105748 |
| NHL66248.1 | hypothetical protein EIB72_07610 | -0.105792 |
| NHL70510.1 | nitroreductase | -0.105853 |
| NHL65075.1 | 30S ribosomal protein S5 | -0.107838 |
| NHL67599.1 | sulfate ABC transporter substrate-binding protein | -0.108541 |
| NHL65783.1 | RlxA family pseudouridine synthase | -0.108664 |
| NHL67309.1 | recombinase RecA | -0.109104 |
| NHL66473.1 | GTPase HflX | -0.110157 |
| NHL66745.1 | inositol monophosphatase | -0.110869 |
| NHL67459.1 | RNase adapter RapZ | -0.111031 |
| NHL67510.1 | methyltransferase domain-containing protein | -0.111197 |
| NHL65336.1 | transketolase | -0.111476 |
| NHL67727.1 | hypothetical protein EIB72_15190 | -0.112108 |
| NHL67087.1 | arginine/lysine/ornithine decarboxylase | -0.112627 |
| NHL65718.1 | (d)CMP kinase | -0.114824 |
| NHL65654.1 | septum site-determining protein MinD | -0.116282 |
| NHL67035.1 | CDP-glucose 4,6-dehydratase | -0.116456 |
| NHL67725.1 | coniferyl aldehyde dehydrogenase | -0.116613 |
| NHL65407.1 | polyisoprenoid-binding protein | -0.117409 |
| NHL65055.1 | elongation factor G | -0.118083 |
| NHL65182.1 | type VI secretion system ATPase TssH | -0.11942 |
| NHL66959.1 | YebC/PmpR family DNA-binding transcriptional regulator | -0.119958 |
| NHL65884.1 | exodeoxyribonuclease V subunit gamma | -0.120183 |
| NHL65800.1 | sugar dehydratase | -0.120702 |
| NHL65855.1 | succinylglutamate-semialdehyde dehydrogenase | -0.125216 |
| NHL67747.1 | response regulator transcription factor | -0.12662 |
| NHL68883.1 | type 1 glutamine amidotransferase domain-containing protein | -0.127749 |
| NHL65935.1 | biotin-independent malonate decarboxylase subunit beta | -0.128668 |
| NHL67285.1 | pyruvate kinase | -0.130292 |
| NHL67750.1 | acetylglutamate kinase | -0.130919 |
| NHL66746.1 | NAD(P)/FAD-dependent oxidoreductase | -0.132365 |
| NHL65288.1 | hypoxanthine-guanine phosphoribosyltransferase | -0.132964 |
| NHL67859.1 | PadR family transcriptional regulator | -0.133015 |
| NHL68581.1 | DNA-binding protein | -0.133935 |
| NHL67162.1 | carboxylating nicotinate-nucleotidyl diphosphorylase | -0.134825 |
| NHL66534.1 | DUF47 domain-containing protein | -0.134965 |
| NHL67443.1 | excinuclease ABC subunit UvrA | -0.135497 |
| NHL68463.1 | polypropenyl synthetase family protein | -0.135658 |
| NHL68560.1 | phosphoribosylanthranilate isomerase | -0.136265 |
| NHL66920.1 | 30S ribosomal protein S15 | -0.136612 |
| NHL68231.1 | phosphoesterase | -0.137745 |
| NHL69262.1 | SagB/ThcOx family dehydrogenase | -0.138092 |
| NHL65300.1 | carbohydrate kinase family protein | -0.138346 |
| NHL65570.1 | NAD-dependent epimerase/dehydratase family protein | -0.140228 |
| NHL66664.1 | lipid A-disaccharide synthase | -0.140938 |
| NHL67354.1 | tRNA (N6-isopentenyl adenosine(37)-C2)-methylthiotransferase MiaB | -0.141951 |
| NHL66213.1 | cysteine ABC transporter substrate-binding protein | -0.142529 |
| NHL69770.1 | ABC transporter substrate-binding protein | -0.145258 |
| NHL65393.1 | tRNA 2-thiouridine(34) synthase MnmA | -0.147771 |
| NHL70791.1 | GntR family transcriptional regulator | -0.148244 |
| NHL65469.1 | heparinase | -0.149179 |
| NHL65337.1 | type I glyceraldehyde-3-phosphate dehydrogenase | -0.152455 |
| NHL66139.1 | 50S ribosomal protein L35 | -0.152598 |
| NHL68588.1 | formate dehydrogenase accessory protein FdhE | -0.153411 |
| NHL67758.1 | homoserine O-acetyltransferase | -0.153828 |
| NHL64851.1 | glutamate-cysteine ligase | -0.154218 |
| NHL67050.1;NHL69416.1 | ATP-binding cassette domain-containing protein | -0.154239 |
| NHL66449.1 | sugar kinase | -0.154364 |
| NHL67393.1 | sterol-binding protein | -0.15458 |
| NHL69481.1 | 2-dehydropantoate 2-reductase | -0.155965 |
| NHL70751.1 | NAD-dependent succinate-semialdehyde dehydrogenase | -0.156131 |
| NHL65372.1 | dihydroorotate | -0.157052 |
| NHL67777.1 | 7-carboxy-7-deazaguanine synthase | -0.157084 |
| NHL66482.1 | nucleoside-diphosphate kinase | -0.158145 |
| NHL67837.1 | ParB/RepB/Spo01 family partition protein | -0.159207 |
| NHL65717.1 | 3-phosphoshikimate 1-carboxyvinyltransferase | -0.161276 |
| NHL65626.1 | transcription antitermination factor NusB | -0.161799 |
| NHL65742.1 | ribosome maturation factor RimM | -0.162296 |
| NHL65077.1 | 50S ribosomal protein L15 | -0.163485 |
| NHL66496.1 | transcription termination factor Rho | -0.163786 |
| NHL68692.1 | branched-chain amino acid ABC transporter substrate-binding protein | -0.16385 |
| NHL65437.1 | heat-inducible transcriptional repressor HrcA | -0.164454 |
| NHL67369.1 | 16S rRNA (adenine(1518)-N(6)/adenine(1519)-N(6))-dimethyltransferase RsmA | -0.165136 |
| NHL69825.1 | winged helix-turn-helix transcriptional regulator | -0.167439 |
| NHL66682.1 | NAD-dependent DNA ligase LigA | -0.168954 |
| NHL66684.1 | chromosome segregation protein SMC | -0.169187 |
| NHL67767.1 | Asp-tRNA(Asn)/Glu-tRNA(Gln) amidotransferase subunit GatA | -0.169273 |
| NHL66621.1 | PspA/IM30 family protein | -0.169282 |
| NHL64885.1 | FOF1 ATP synthase subunit alpha | -0.170041 |
| NHL66519.1 | threonine synthase | -0.170361 |
| NHL67395.1 | bifunctional demethylmenaquinone methyltransferase/2-methoxy-6-polypropenyl-1,4-benzoquinol methylase | -0.170732 |
| NHL67437.1 | acetyl-CoA C-acetyltransferase | -0.17081 |
| NHL65083.1 | 30S ribosomal protein S4 | -0.170811 |
| NHL66875.1 | cupredoxin domain-containing protein | -0.170956 |
| NHL67222.1 | AMIN domain-containing protein | -0.173206 |
| NHL65567.1 | methyltransferase domain-containing protein | -0.17758 |
| NHL67445.1 | formyltetrahydrofolate deformylase | -0.178537 |
| NHL66600.1 | 2-dehydropantoate 2-reductase | -0.179139 |

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| NHL68471.1 | DNA primase | -0.181815 | |
| NHL67117.1 | SIMPL domain-containing protein | -0.182507 | |
| NHL66481.1 | 23S rRNA (adenine(2503)-C(2))-methyltransferase RlmN | -0.182704 | |
| NHL65054.1 | 30S ribosomal protein S7 | -0.183472 | |
| NHL68563.1 | tryptophan synthase subunit alpha | -0.183908 | |
| NHL67300.1 | hypothetical protein EIB72_13045 | -0.185538 | |
| NHL66862.1 | fumarate hydratase | -0.185989 | |
| NHL67036.1 | glucose-1-phosphate cytidylyltransferase | -0.186227 | |
| NHL67070.1 | inorganic diphosphatase | -0.186334 | |
| NHL65715.1 | prephenate dehydratase | -0.186772 | |
| NHL65578.1 | UDP-glucose 4-epimerase GalE | -0.186802 | |
| NHL68976.1 | hypothetical protein EIB72_21545 | -0.187468 | |
| NHL71009.1 | DUF3416 domain-containing protein | -0.187719 | |
| NHL65425.1 | FAD-binding protein | -0.18808 | |
| NHL66990.1 | polyhydroxyalkanoate depolymerase | -0.188231 | |
| NHL67488.1 | N-acetylglucosamine-6-phosphate deacetylase | -0.188247 | |
| NHL66793.1 | IclR family transcriptional regulator | -0.1883 | |
| NHL65102.1 | 3-dehydroquinate synthase | -0.189056 | |
| NHL67786.1 | peptide deformylase | -0.18926 | |
| NHL66989.1 | glycoside hydrolase family 15 protein | -0.189723 | |
| NHL70601.1 | alpha/beta fold hydrolase | -0.190464 | |
| NHL65381.1 | histidine phosphatase family protein | -0.1906 | |
| NHL68726.1 | 2OG-Fe(II) oxygenase | -0.190867 | |
| NHL65082.1 | 30S ribosomal protein S11 | -0.191713 | |
| NHL67572.1 | methionine synthase | -0.193154 | |
| NHL67281.1 | 5-(carboxyamino)imidazole ribonucleotide synthase | -0.193551 | |
| NHL65470.1 | N-acetyltransferase | -0.19375 | |
| NHL67790.1 | LysR family transcriptional regulator | -0.194194 | |
| NHL68392.1 | helix-turn-helix domain-containing protein | -0.194379 | |
| NHL67009.1 | molecular chaperone HtpG | -0.195518 | |
| NHL67034.1 | lipopolysaccharide biosynthesis protein RfbH | -0.196146 | |
| NHL69331.1 | MerR family transcriptional regulator | -0.197034 | |
| NHL67378.1 | acyl-CoA thioesterase | -0.197124 | |
| NHL66572.1 | LysR family transcriptional regulator | -0.198355 | |
| NHL65360.1 | TetR family transcriptional regulator | -0.198493 | |
| NHL68159.1 | DUF2760 domain-containing protein | -0.198635 | |
| NHL65465.1 | UDP-N-acetyl-D-mannosamine dehydrogenase | -0.201007 | |
| NHL66596.1 | trigger factor | -0.201137 | |
| NHL66668.1 | OmpH family outer membrane protein | -0.201417 | |
| NHL65197.1 | SAM-dependent methyltransferase | -0.203548 | |
| NHL66555.1 | ankyrin repeat domain-containing protein | -0.203638 | |
| NHL68569.1 | O-succinylhomoserine sulfhydrylase | -0.205428 | |
| NHL67212.1 | ornithine carbamoyltransferase | -0.209814 | |
| NHL67843.1 | glycine C-acetyltransferase | -0.210021 | |
| NHL67559.1 | biotin-[acetyl-CoA-carboxylase] ligase | -0.210318 | |
| NHL66768.1 | phosphopyruvate hydratase | -0.21092 | |
| NHL67355.1 | PhoH family protein | -0.211068 | |
| NHL64964.1 | chemotaxis protein CheA | -0.211258 | |
| NHL68557.1 | aspartate-semialdehyde dehydrogenase | -0.211578 | |
| NHL68445.1 | molybdate ABC transporter substrate-binding protein | -0.212179 | |
| NHL67148.1 | acetylornithine transaminase | -0.213825 | |
| NHL65002.1 | hypothetical protein EIB72_01090 | -0.213899 | |
| NHL68077.1 | glutamine-fructose-6-phosphate transaminase (isomerizing) | -0.21508 | |
| NHL68854.1 | quinone oxidoreductase | -0.215569 | |
| NHL64877.1 | ParA family protein | -0.215737 | |
| NHL64983.1 | methylenetetrahydrofolate reductase | -0.216063 | |
| NHL66593.1 | endopeptidase La | -0.216422 | |
| NHL70654.1 | excinuclease ABC subunit UvrA | -0.219563 | |
| NHL68250.1 | NAD(P)H-dependent oxidoreductase | -0.219778 | |
| NHL67179.1 | NADP-dependent isocitrate dehydrogenase | -0.22027 | + |
| NHL65751.1 | molybdopterin adenylyltransferase | -0.221906 | |
| NHL66560.1 | folate-binding protein YgfZ | -0.222291 | |
| NHL65667.1 | YicC family protein | -0.224251 | |
| NHL64981.1 | adenosylhomocysteinase | -0.224635 | |
| NHL65050.1 | DNA-directed RNA polymerase subunit beta | -0.225089 | |
| NHL65723.1 | UDP-glucose/GDP-mannose dehydrogenase family protein | -0.226643 | |
| NHL65971.1 | exopolyphosphatase | -0.228615 | |
| NHL65692.1 | adenosine deaminase | -0.22982 | |
| NHL66380.1 | hypothetical protein EIB72_08270 | -0.230023 | |
| NHL67785.1 | methionyl-tRNA formyltransferase | -0.231031 | |
| NHL70450.1 | replication initiation protein | -0.231728 | |
| NHL70800.1 | H-NS histone family protein | -0.231991 | |
| NHL66739.1 | tetratricopeptide repeat protein | -0.233052 | |
| NHL69809.1 | NAD(P)H-dependent oxidoreductase | -0.233339 | |
| NHL65081.1 | 30S ribosomal protein S13 | -0.23347 | |
| NHL66479.1 | flavodoxin-dependent (E)-4-hydroxy-3-methylbut-2-enyl-diphosphate synthase | -0.233542 | |
| NHL68997.1 | NADP-dependent oxidoreductase | -0.233751 | |
| NHL66585.1 | N-acetyltransferase | -0.234076 | |
| NHL67999.1 | DUF2322 family protein | -0.234189 | |
| NHL66674.1 | ribosome recycling factor | -0.236034 | |
| NHL65229.1 | uracil-DNA glycosylase | -0.237209 | |
| NHL66531.1 | PhoH family protein | -0.237736 | |
| NHL65892.1 | phosphomethylpyrimidine synthase Thic | -0.23819 | + |
| NHL65085.1 | 50S ribosomal protein L17 | -0.238324 | |
| NHL66778.1 | peptide chain release factor 2 | -0.240547 | + |
| NHL66159.1 | transcription termination/antitermination protein NusA | -0.240817 | |
| NHL67458.1 | HPr kinase/phosphorylase | -0.242103 | |
| NHL68950.1 | proline racemase family protein | -0.242598 | |
| NHL65378.1 | anhydro-N-acetylmuramic acid kinase | -0.242772 | |
| NHL66757.1 | class I SAM-dependent methyltransferase | -0.242837 | |
| NHL64861.1 | Lrp/Asm family transcriptional regulator | -0.243217 | |
| NHL66475.1 | ribosome biogenesis GTPase Der | -0.245165 | |
| NHL66255.1 | sulfate ABC transporter substrate-binding protein | -0.24641 | |
| NHL67744.1 | RNA polymerase-binding protein OksA | -0.249939 | |
| NHL65375.1 | 50S ribosomal protein L13 | -0.250902 | |
| NHL66786.1 | Fe-S cluster assembly scaffold IscU | -0.251918 | |
| NHL67133.1 | nitrite/sulfite reductase | -0.252502 | |
| NHL67466.1 | ribose-phosphate pyrophosphokinase | -0.255229 | |

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| NHL65345.1 | ferric iron uptake transcriptional regulator | -0.255882 | |
| NHL68568.1 | amidophosphoribosyltransferase | -0.256269 | |
| NHL69869.1 | TetrA/Cr family transcriptional regulator | -0.257278 | |
| NHL65561.1 | glucose-1-phosphate thymidylyltransferase RfbA | -0.259172 | |
| NHL66928.1 | ketol-acid reductoisomerase | -0.259277 | |
| NHL68460.1 | sulfurtransferase | -0.260408 | |
| NHL67768.1 | Asp-tRNA(Asn)/Glu-tRNA(Gln) amidotransferase subunit GatC | -0.26059 | |
| NHL65733.1 | MetQ/NlpA family ABC transporter substrate-binding protein | -0.261204 | |
| NHL64886.1 | F0F1 ATP synthase subunit gamma | -0.262881 | |
| NHL65467.1 | heparinase | -0.264617 | |
| NHL71023.1 | DUF1488 domain-containing protein | -0.265875 | |
| NHL67265.1 | efflux transporter outer membrane subunit | -0.265993 | |
| NHL66686.1 | succinyldiaminopimelate transaminase | -0.270065 | |
| NHL68093.1 | CsbD family protein | -0.270363 | |
| NHL67383.1 | 3-hydroxyacyl-CoA dehydrogenase/enoyl-CoA hydratase family protein | -0.271605 | |
| NHL66787.1 | iscS subfamily cysteine desulfurase | -0.272646 | |
| NHL64923.1 | L-serine ammonia-lyase | -0.274045 | |
| NHL68949.1 | branched-chain amino acid ABC transporter substrate-binding protein | -0.275241 | |
| NHL65713.1 | DUF2059 domain-containing protein | -0.275777 | |
| NHL66740.1 | peptidyl-prolyl cis-trans isomerase | -0.276576 | |
| NHL66228.1 | tRNA dihydrouridine(20/20a) synthase DusA | -0.276814 | + |
| NHL67092.1 | methionine-tRNA ligase | -0.277174 | + |
| NHL66191.1 | RNA chaperone Hfq | -0.27739 | |
| NHL66912.1 | NADH-quinone oxidoreductase subunit D | -0.277828 | |
| NHL65568.1 | glycosyltransferase | -0.278547 | |
| NHL69251.1;NHL68986.1 | universal stress protein | -0.279622 | |
| NHL67521.1 | phosphoenolpyruvate-protein phosphotransferase | -0.281485 | |
| NHL70150.1 | DUF480 domain-containing protein | -0.282502 | |
| NHL70560.1 | hypothetical protein EIB72_29755 | -0.284754 | |
| NHL65074.1 | 50S ribosomal protein L18 | -0.28586 | |
| NHL67382.1 | acetyl-CoA C-acyltransferase | -0.286053 | |
| NHL66669.1 | outer membrane protein assembly factor BamA | -0.286256 | |
| NHL68122.1 | chaperonin GroEL | -0.287831 | |
| NHL65675.1 | DNA polymerase III subunit epsilon | -0.287868 | |
| NHL67187.1 | GntR family transcriptional regulator | -0.288022 | + |
| NHL68185.1 | putative addiction module antidote protein | -0.289434 | |
| NHL70133.1 | hypothetical protein EIB72_27525 | -0.28945 | |
| NHL68457.1 | DNA polymerase I | -0.289755 | |
| NHL65391.1 | glutathione S-transferase | -0.289805 | |
| NHL70372.1 | hypothetical protein EIB72_28750 | -0.289892 | |
| NHL66878.1 | aspartate/tyrosine/aromatic aminotransferase | -0.29052 | + |
| NHL66801.1 | bifunctional methylenetetrahydrofolate dehydrogenase/methenyltetrahydrofolate cyclohydrolase | -0.291194 | |
| NHL66921.1 | branched-chain amino acid ABC transporter substrate-binding protein | -0.291665 | |
| NHL65719.1 | 30S ribosomal protein S1 | -0.2929 | + |
| NHL67371.1 | molecular chaperone SurA | -0.292988 | |
| NHL66863.1 | bacterioferritin | -0.293562 | |
| NHL70672.1 | DUF3696 domain-containing protein | -0.295039 | |
| NHL67167.1 | phosphoribosylglycinamide formyltransferase | -0.297091 | |
| NHL67583.1 | carbonate dehydratase | -0.297619 | |
| NHL65237.1 | Co ²⁺ /Mg ²⁺ efflux protein ApaG | -0.297838 | |
| NHL65138.1 | phosphoribosyl-AMP cyclohydrolase | -0.298542 | |
| NHL70718.1 | S-(hydroxymethyl)glutathione dehydrogenase/class III alcohol dehydrogenase | -0.299007 | |
| NHL65646.1 | outer membrane lipoprotein chaperone LolA | -0.300199 | |
| NHL66066.1 | alpha/beta hydrolase | -0.302396 | |
| NHL65811.1 | sigma-54-dependent Fis family transcriptional regulator | -0.3034 | |
| NHL65129.1 | UDP-N-acetylglucosamine 1-carboxyvinyltransferase | -0.303972 | |
| NHL65072.1 | 30S ribosomal protein S8 | -0.304959 | |
| NHL68375.1 | acetolactate synthase large subunit | -0.305929 | |
| NHL65262.1 | cell division protein FtsA | -0.306081 | |
| NHL65312.1 | shikimate dehydrogenase | -0.306697 | |
| NHL67144.1 | 16S rRNA pseudouridine(516) synthase | -0.307943 | + |
| NHL65376.1 | 30S ribosomal protein S9 | -0.30817 | |
| NHL64888.1 | F0F1 ATP synthase subunit epsilon | -0.309828 | |
| NHL70670.1 | DEAD/DEAH box helicase | -0.311956 | |
| NHL65605.1 | tRNA (guanosine(46)-N7)-methyltransferase TrmB | -0.312407 | |
| NHL66958.1 | uracil phosphoribosyltransferase | -0.312641 | |
| NHL66282.1 | fimbrial protein | -0.314107 | |
| NHL65060.1 | 50S ribosomal protein L23 | -0.314128 | |
| NHL65203.1 | cold-shock protein | -0.314342 | |
| NHL65383.1 | Holliday junction branch migration DNA helicase RuvB | -0.315656 | |
| NHL65071.1 | 30S ribosomal protein S14 | -0.316593 | |
| NHL67363.1 | glycine-tRNA ligase subunit beta | -0.317435 | |
| NHL67743.1 | GTP-binding protein | -0.31835 | |
| NHL70821.1 | helicase | -0.318619 | |
| NHL65668.1 | guanylate kinase | -0.319349 | |
| NHL67132.1 | DUF934 domain-containing protein | -0.321641 | |
| NHL67778.1 | 7-cyano-7-deazaguanine synthase Quec | -0.324593 | |
| NHL71148.1 | galactose mutarotase | -0.325342 | |
| NHL68525.1 | succinate dehydrogenase flavoprotein subunit | -0.326206 | |
| NHL67033.1 | NAD-dependent epimerase/dehydratase family protein | -0.32669 | + |
| NHL65963.1 | phosphate ABC transporter substrate-binding protein PstS | -0.327138 | |
| NHL66324.1 | precorrin-8X methylmutase | -0.328604 | |
| NHL68470.1 | GatB/YqeY domain-containing protein | -0.329506 | |
| NHL67828.1 | ATP-binding protein | -0.333234 | |
| NHL68462.1 | exodeoxyribonuclease VII small subunit | -0.333303 | |
| NHL67114.1 | ATPase | -0.333944 | |
| NHL67782.1 | 16S rRNA (cytosine(967)-C(5'))-methyltransferase RsmB | -0.334243 | |
| NHL65048.1 | 50S ribosomal protein L10 | -0.334458 | |
| NHL65961.1 | dihydroteroate synthase | -0.33488 | |
| NHL70106.1 | H-NS histone family protein | -0.337802 | |
| NHL68564.1 | acetyl-CoA carboxylase carboxyltransferase subunit beta | -0.338075 | + |
| NHL66661.1 | kinase/pyrophosphorylase | -0.338243 | |
| NHL70027.1 | MetQ/NlpA family lipoprotein | -0.339947 | |
| NHL68783.1 | acyl carrier protein | -0.340529 | |
| NHL66815.1 | beta-propeller fold lactonase family protein | -0.341495 | |
| NHL66500.1 | type B 50S ribosomal protein L31 | -0.341985 | |
| NHL66892.1 | pyridoxal phosphate-dependent aminotransferase | -0.34367 | |
| NHL68509.1 | ABC transporter substrate-binding protein | -0.345069 | |

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| NHL67516.1 | glutaredoxin 3 | -0.346093 | |
| NHL66755.1 | outer membrane protein assembly factor BamC | -0.346099 | |
| NHL66157.1 | pseudouridine synthase | -0.346773 | |
| NHL66967.1 | DUF469 family protein | -0.346896 | |
| NHL69484.1 | hypothetical protein EIB72_24220 | -0.348634 | |
| NHL64891.1 | uroporphyrinogen decarboxylase | -0.348655 | |
| NHL67769.1 | rod shape-determining protein | -0.349682 | |
| NHL66617.1 | transcription-repair coupling factor | -0.349764 | |
| NHL65828.1 | copper chaperone PCu(A)C | -0.351052 | |
| NHL65123.1 | VacI family lipoprotein | -0.351739 | |
| NHL66769.1 | 3-deoxy-8-phosphooculonate synthase | -0.352969 | + |
| NHL69756.1 | hypothetical protein EIB72_25595 | -0.353267 | |
| NHL66784.1 | Fe-S protein assembly co-chaperone HscB | -0.356021 | |
| NHL67367.1 | lactoylglutathione lyase | -0.35699 | |
| NHL67839.1 | DNA-binding protein | -0.357019 | |
| NHL66749.1 | DNA mismatch repair protein MutS | -0.358601 | |
| NHL65430.1 | 3-deoxy-7-phosphoheptulonate synthase AroG | -0.359637 | + |
| NHL67812.1 | YaeQ family protein | -0.359907 | |
| NHL65379.1 | tyrosine-tRNA ligase | -0.360043 | |
| NHL66469.1 | ATP phosphoribosyltransferase regulatory subunit | -0.360227 | |
| NHL65477.1 | SDR family NAD(P)-dependent oxidoreductase | -0.361279 | |
| NHL66062.1 | hypothetical protein EIB72_06645 | -0.362209 | |
| NHL65154.1 | type VI secretion system tip protein VgrG | -0.362457 | |
| NHL66788.1 | Fe-S cluster assembly transcriptional regulator IscR | -0.364172 | |
| NHL66808.1 | nitrogen regulation protein NR(I) | -0.364711 | |
| NHL65330.1 | NADP-dependent malic enzyme | -0.365937 | |
| NHL65250.1 | 16S rRNA (cytosine(1402)-N(4))-methyltransferase RsmH | -0.368787 | |
| NHL65754.1 | dihydrofolate reductase | -0.36927 | |
| NHL67202.1 | exodeoxyribonuclease VII large subunit | -0.370495 | |
| NHL70306.1 | transporter substrate-binding domain-containing protein | -0.371055 | |
| NHL65070.1 | 50S ribosomal protein L5 | -0.371086 | + |
| NHL66741.1 | peptidyl-prolyl cis-trans isomerase | -0.371419 | + |
| NHL65350.1 | leucine-tRNA ligase | -0.374437 | + |
| NHL67707.1 | ferredoxin-NADP reductase | -0.374709 | |
| NHL69518.1 | DUF1653 domain-containing protein | -0.377422 | |
| NHL65955.1 | carbamoyl-phosphate synthase large subunit | -0.377426 | + |
| NHL67638.1 | glutamine-fructose-6-phosphate transaminase (isomerizing) | -0.377804 | + |
| NHL67157.1 | peptidylprolyl isomerase | -0.377937 | + |
| NHL67576.1 | thiol-disulfide interchange protein DsbA/DsbL | -0.379632 | |
| NHL70132.1 | hypothetical protein EIB72_27520 | -0.380013 | |
| NHL66486.1 | 3'-5' exonuclease | -0.380735 | |
| NHL70417.1 | Zn-dependent hydrolase | -0.381055 | |
| NHL68777.1 | polyphosphate kinase 2 | -0.38338 | |
| NHL66557.1 | DNA polymerase III subunit delta | -0.384219 | |
| NHL70889.1 | TauD/TfdA family dioxygenase | -0.384377 | |
| NHL67022.1 | DNA topoisomerase IV subunit A | -0.385628 | |
| NHL65988.1 | homocitrate synthase | -0.386718 | |
| NHL65725.1 | ADP-glyceromanno-heptose 6-epimerase | -0.386959 | |
| NHL65808.1 | pyridoxine 5-phosphate synthase | -0.387035 | |
| NHL66838.1 | histidine ammonia-lyase | -0.388395 | |
| NHL67486.1 | phosphoenolpyruvate--protein phosphotransferase | -0.389036 | + |
| NHL65399.1 | class I SAM-dependent RNA methyltransferase | -0.390891 | |
| NHL67024.1 | ATP-binding cassette domain-containing protein | -0.392685 | |
| NHL65599.1 | protein-L-isoaspartate O-methyltransferase | -0.393212 | |
| NHL69393.1 | DUF4902 domain-containing protein | -0.393273 | |
| NHL66100.1 | valine-tRNA ligase | -0.394598 | + |
| NHL65068.1 | 50S ribosomal protein L14 | -0.394862 | + |
| NHL65057.1 | 30S ribosomal protein S10 | -0.395571 | |
| NHL65464.1 | UDP-N-acetylglucosamine 2-epimerase (non-hydrolyzing) | -0.396645 | |
| NHL65286.1 | proline-tRNA ligase | -0.39673 | |
| NHL66738.1 | cysteine-tRNA ligase | -0.397642 | |
| NHL67733.1 | phytanoyl-CoA dioxygenase family protein | -0.399706 | |
| NHL67567.1 | fumarylacetacetate hydrolase family protein | -0.400177 | |
| NHL65582.1 | phosphomannomutase/phosphoglucomutase | -0.400581 | |
| NHL67636.1 | tRNA 2-thiocytidine(32) synthetase TtcA | -0.401045 | |
| NHL67273.1 | carboxypeptidase regulatory-like domain-containing protein | -0.401155 | |
| NHL65111.1 | glutamate synthase subunit alpha | -0.401557 | + |
| NHL71013.1 | malto-oligosyltrehalose trehalohydrolase | -0.401557 | |
| NHL65224.1 | redox-regulated ATPase YchF | -0.402868 | + |
| NHL66985.1 | formate-dependent phosphoribosylglycinamide formyltransferase | -0.403404 | |
| NHL65047.1 | 50S ribosomal protein L1 | -0.406636 | |
| NHL67129.1 | sulfate adenylyltransferase subunit 1 | -0.407043 | |
| NHL64998.1 | SIS domain-containing protein | -0.407059 | |
| NHL65051.1 | DNA-directed RNA polymerase subunit beta | -0.408311 | + |
| NHL69658.1 | branched-chain amino acid ABC transporter substrate-binding protein | -0.410077 | |
| NHL67284.1 | fructose-bisphosphate aldolase class II | -0.411832 | + |
| NHL67077.1 | phosphoenolpyruvate carboxylase | -0.413006 | |
| NHL65061.1 | 50S ribosomal protein L2 | -0.413729 | + |
| NHL65962.1 | phosphoglucosamine mutase | -0.416082 | |
| NHL67023.1 | type IIA DNA topoisomerase subunit B | -0.417725 | |
| NHL67123.1 | DNA polymerase III subunit chi | -0.417782 | |
| NHL65267.1 | preprotein translocase subunit SecA | -0.419893 | |
| NHL66138.1 | translation initiation factor IF-3 | -0.420261 | + |
| NHL65649.1 | serine-tRNA ligase | -0.421939 | + |
| NHL67688.1 | lytic transglycosylase domain-containing protein | -0.422032 | |
| NHL65814.1 | excinuclease ABC subunit UvrC | -0.423381 | |
| NHL70452.1 | ParA family protein | -0.427263 | |
| NHL66736.1 | acetyl-CoA carboxylase carboxyltransferase subunit alpha | -0.428084 | |
| NHL67031.1 | transketolase | -0.429081 | |
| NHL66446.1 | phosphoserine phosphatase SerB | -0.430431 | + |
| NHL66930.1 | acetolactate synthase 3 catalytic subunit | -0.430527 | + |
| NHL65819.1 | N-acetyltransferase | -0.430601 | |
| NHL65263.1 | cell division protein FtsZ | -0.430733 | + |
| NHL70131.1 | type VI secretion system tip protein VgrG | -0.431768 | + |
| NHL66209.1 | ribose-5-phosphate isomerase RpiA | -0.431796 | |
| NHL65812.1 | elongation factor P | -0.433322 | |
| NHL65625.1 | pyridoxal phosphate-dependent aminotransferase | -0.433734 | |
| NHL68734.1 | dihydroxy-acid dehydratase | -0.435138 | |

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| NHL67543.1 | lipoyl synthase | -0.436459 | |
| NHL69394.1 | GNAT family N-acetyltransferase | -0.436874 | |
| NHL70104.1 | hypothetical protein E1B72_27380 | -0.437122 | |
| NHL65947.1 | DNA polymerase III subunit epsilon | -0.437126 | |
| NHL67776.1 | 6-carboxytetrahydropterin synthase Qued | -0.438435 | |
| NHL66099.1 | UTP-glucose-1-phosphate uridyltransferase GalU | -0.438515 | |
| NHL65311.1 | RNB domain-containing ribonuclease | -0.440056 | |
| NHL65959.1 | RlmE family RNA methyltransferase | -0.440822 | |
| NHL66263.1 | substrate-binding domain-containing protein | -0.441807 | |
| NHL66671.1 | 1-deoxy-D-xylulose-5-phosphate reductoisomerase | -0.442383 | |
| NHL67375.1 | AAA family ATPase | -0.442584 | |
| NHL64852.1 | winged helix-turn-helix transcriptional regulator | -0.443394 | |
| NHL66484.1 | 23S rRNA (uracil(1939)-C(5))-methyltransferase RlmD | -0.444188 | |
| NHL66584.1 | peptidylprolyl isomerase | -0.444236 | + |
| NHL65063.1 | 50S ribosomal protein L22 | -0.445708 | |
| NHL66141.1 | phenylalanine-tRNA ligase subunit alpha | -0.4459 | |
| NHL66677.1 | 30S ribosomal protein S2 | -0.446072 | |
| NHL66586.1 | phosphoribosylformylglycinamide synthase | -0.446143 | + |
| NHL67374.1 | nucleotidyltransferase family protein | -0.446261 | |
| NHL66864.1 | glutamate racemase | -0.449291 | |
| NHL69945.1 | putative multidrug efflux transcriptional regulator CeoR | -0.450002 | |
| NHL67830.1 | hypothetical protein E1B72_15720 | -0.450017 | |
| NHL71073.1 | SDR family oxidoreductase | -0.451366 | |
| NHL66451.1 | hypothetical protein E1B72_08635 | -0.451992 | |
| NHL65788.1 | septum formation protein Maf | -0.452574 | + |
| NHL67169.1 | isoleucine-tRNA ligase | -0.453685 | |
| NHL65058.1 | 50S ribosomal protein L3 | -0.459394 | + |
| NHL66142.1 | phenylalanine-tRNA ligase subunit beta | -0.46147 | |
| NHL69171.1 | cysteine hydrolase | -0.461765 | |
| NHL65045.1 | transcription termination/antitermination protein NusG | -0.462476 | |
| NHL65431.1 | metalloprotease TldD | -0.462554 | |
| NHL70976.1 | BON domain-containing protein | -0.462895 | |
| NHL71079.1 | four-helix bundle copper-binding protein | -0.463627 | |
| NHL68396.1 | NADP-dependent oxidoreductase | -0.464281 | |
| NHL67467.1 | 50S ribosomal protein L25/general stress protein Ctc | -0.464987 | |
| NHL66770.1 | CTP synthase | -0.465045 | + |
| NHL67134.1 | CysB family HTH-type transcriptional regulator | -0.465158 | |
| NHL70308.1 | catalase/peroxidase HPI | -0.46709 | + |
| NHL67831.1 | DNA cytosine methyltransferase | -0.4671 | |
| NHL65179.1 | type VI secretion system baseplate subunit TssE | -0.467333 | |
| NHL65243.1 | phenylacetic acid degradation protein PaaN | -0.468395 | |
| NHL66478.1 | histidine-tRNA ligase | -0.469737 | |
| NHL66068.1 | alanine-tRNA ligase | -0.47132 | + |
| NHL65270.1 | NUDIX domain-containing protein | -0.471456 | |
| NHL71058.1 | SDR family oxidoreductase | -0.471885 | |
| NHL64893.1 | trifunctional transcriptional regulator/proline dehydrogenase/L-glutamate gamma-semialdehyde dehydrogenase | -0.473337 | + |
| NHL66696.1 | alanine racemase | -0.474749 | |
| NHL69572.1 | hypothetical protein E1B72_24665 | -0.47577 | + |
| NHL67147.1 | CDP-6-deoxy-delta-3,4-glucosene reductase | -0.476262 | |
| NHL65862.1 | SDR family oxidoreductase | -0.476471 | |
| NHL65953.1 | glutamine-hydrolyzing carbamoyl-phosphate synthase small subunit | -0.47915 | |
| NHL67330.1 | c-type cytochrome | -0.479801 | |
| NHL70673.1 | DUF262 domain-containing protein | -0.47987 | |
| NHL66890.1 | peroxide stress protein YaaA | -0.480212 | |
| NHL65202.1 | Hsp70 family protein | -0.480396 | |
| NHL66689.1 | succinyl-diaminopimelate desuccinylase | -0.482875 | + |
| NHL67283.1 | phosphoribosylaminoimidazolesuccinocarboxamide synthase | -0.487102 | + |
| NHL67183.1 | DUF192 domain-containing protein | -0.489915 | |
| NHL68646.1 | DUF4397 domain-containing protein | -0.490431 | |
| NHL68910.1 | hypothetical protein E1B72_21215 | -0.491984 | |
| NHL65782.1 | Rne/Rng family ribonuclease | -0.492003 | + |
| NHL66537.1 | 30S ribosomal protein S18 | -0.492071 | + |
| NHL66258.1 | sulfate ABC transporter ATP-binding protein | -0.493983 | |
| NHL67168.1 | bifunctional riboflavin kinase/FAD synthetase | -0.494716 | |
| NHL67296.1 | cyclic pyranopterin monophosphate synthase MoaC | -0.494775 | |
| NHL66435.1 | FRG domain-containing protein | -0.496369 | |
| NHL66779.1 | lysine-tRNA ligase | -0.50249 | |
| NHL66494.1 | DNA polymerase III subunit gamma/tau | -0.504328 | |
| NHL68552.1 | 3-isopropylmalate dehydratase large subunit | -0.504461 | + |
| NHL64935.1 | VRR-NUC domain-containing protein | -0.510056 | |
| NHL65569.1 | GDP-mannose 4,6-dehydratase | -0.510393 | + |
| NHL66520.1 | homoserine dehydrogenase | -0.511056 | |
| NHL66259.1 | CysB family HTH-type transcriptional regulator | -0.51151 | |
| NHL66693.1 | ATP-binding cassette domain-containing protein | -0.512021 | |
| NHL65294.1 | ribonucleoside-diphosphate reductase subunit alpha | -0.514999 | + |
| NHL68645.1 | DUF3005 domain-containing protein | -0.515879 | |
| NHL67518.1 | 2,3-diphosphoglycerate-dependent phosphoglycerate mutase | -0.518202 | + |
| NHL65066.1 | 50S ribosomal protein L29 | -0.518262 | + |
| NHL65444.1 | molecular chaperone DnaJ | -0.518606 | |
| NHL67829.1 | hypothetical protein E1B72_15715 | -0.520878 | + |
| NHL65790.1 | 50S ribosomal protein L32 | -0.52155 | |
| NHL66556.1 | TatD family hydrolase | -0.522924 | + |
| NHL65353.1 | glutamate-5-semialdehyde dehydrogenase | -0.523122 | |
| NHL66161.1 | 30S ribosome-binding factor RbfA | -0.524 | |
| NHL65387.1 | Fis family transcriptional regulator | -0.524068 | |
| NHL67390.1 | zinc ribbon domain-containing protein | -0.525422 | |
| NHL65046.1 | 50S ribosomal protein L11 | -0.526795 | + |
| NHL67364.1 | D-glycero-beta-D-manno-heptose 1,7-bisphosphate 7-phosphatase | -0.527085 | |
| NHL65327.1 | CinA family protein | -0.52737 | |
| NHL70130.1 | phage tail protein | -0.532252 | + |
| NHL67205.1 | 3-deoxy-manno-octulosonate cytidyltransferase | -0.532782 | |
| NHL65806.1 | GTPase Era | -0.534023 | |
| NHL68717.1 | ATP-dependent protease | -0.536372 | |
| NHL65686.1 | class 1 fructose-bisphosphatase | -0.539606 | + |
| NHL67361.1 | tetratricopeptide repeat protein | -0.54936 | |
| NHL66207.1 | 23S rRNA (guanosine(2251)-2-O)-methyltransferase RlmB | -0.550713 | |
| NHL69620.1 | hypothetical protein E1B72_24905 | -0.552496 | |
| NHL67764.1 | exodeoxyribonuclease III | -0.554219 | |

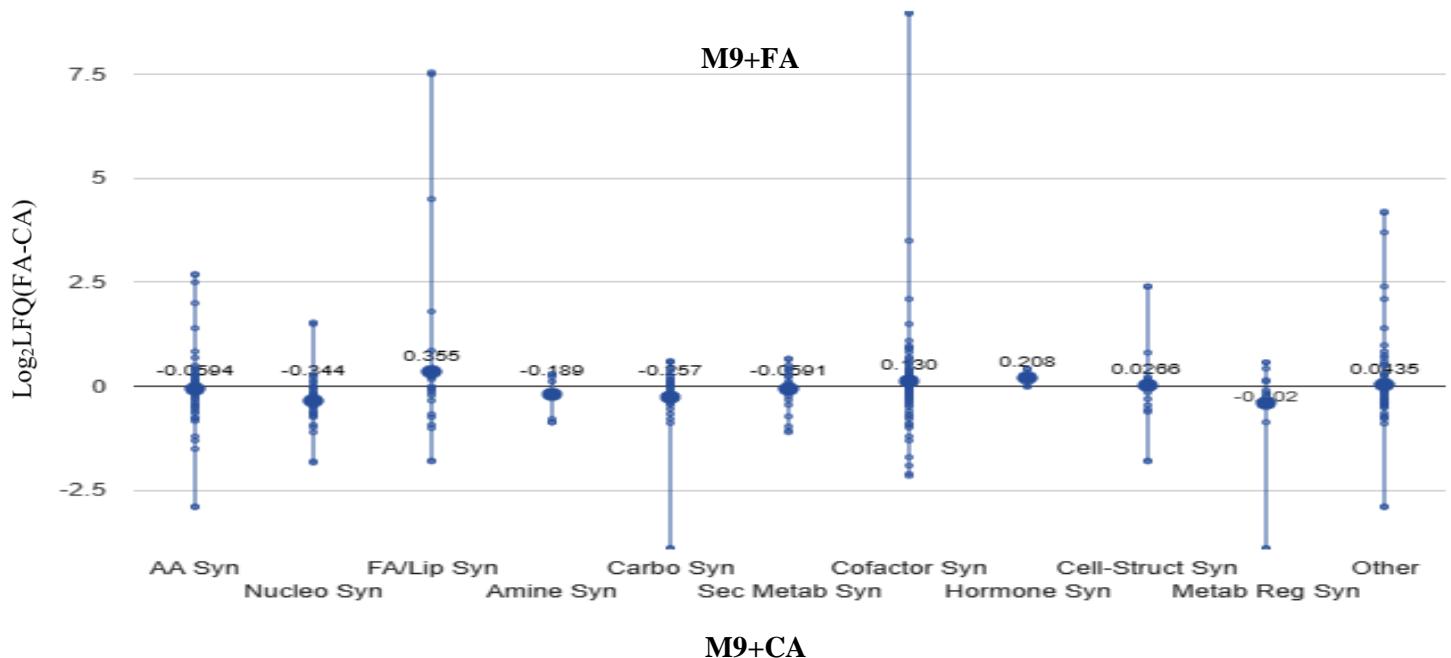
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|------------|---|-----------|---|
| NHL65284.1 | RNA pyrophosphohydrolase | -0.554885 | |
| NHL67282.1 | 5-(carboxyamino)imidazole ribonucleotide mutase | -0.555204 | |
| NHL67335.1 | DeoR/GlpR transcriptional regulator | -0.557427 | |
| NHL65253.1 | UDP-N-acetyl muramoyl-L-alanyl-D-glutamate--2,6-diaminopimelate ligase | -0.557486 | |
| NHL67198.1 | hypothetical protein EIB72_12535 | -0.559541 | |
| NHL66395.1 | MerR family transcriptional regulator | -0.560327 | |
| NHL66171.1 | cell division protein ZapE | -0.560977 | |
| NHL66657.1 | SsrA-binding protein SmpB | -0.561234 | |
| NHL67621.1 | alpha/beta hydrolase | -0.561416 | |
| NHL65452.1 | phosphoribosylformylglycaminidine cyclo-ligase | -0.562325 | |
| NHL65876.1 | NAD(P)H-binding protein | -0.56461 | |
| NHL69466.1 | Arc family DNA-binding protein | -0.57173 | |
| NHL65810.1 | beta-N-acetylhexosaminidase | -0.573714 | + |
| NHL66982.1 | DEAD/DEAH box helicase | -0.575244 | + |
| NHL65787.1 | SAM-dependent methyltransferase | -0.576843 | |
| NHL67297.1 | type VI secretion system tip protein VgrG | -0.576942 | + |
| NHL66465.1 | RNA-binding transcriptional accessory protein | -0.5773 | |
| NHL65205.1 | dioxygenase | -0.578767 | |
| NHL67204.1 | Trm112 family protein | -0.578962 | |
| NHL66960.1 | phosphoribosylamine-glycine ligase | -0.5815 | |
| NHL65817.1 | hypothetical protein EIB72_05375 | -0.581659 | |
| NHL66678.1 | type I methionyl aminopeptidase | -0.58412 | + |
| NHL65272.1 | cell division protein ZapD | -0.585979 | |
| NHL65731.1 | methionine ABC transporter ATP-binding protein | -0.589891 | |
| NHL66687.1 | 2,3,4,5-tetrahydropyridine-2,6-dicarboxylate N-succinyltransferase | -0.59117 | + |
| NHL66961.1 | oxygen-dependent coproporphyrinogen oxidase | -0.591217 | |
| NHL67331.1 | DEAD/DEAH box helicase | -0.592107 | |
| NHL65213.1 | aminopeptidase P family protein | -0.592453 | |
| NHL66536.1 | 50S ribosomal protein L9 | -0.595726 | + |
| NHL68378.1 | HAMP domain-containing histidine kinase | -0.596413 | |
| NHL66869.1 | LysR family transcriptional regulator | -0.599415 | + |
| NHL65226.1 | DsbC family protein | -0.599684 | |
| NHL66167.1 | translational GTPase TypA | -0.600686 | |
| NHL67401.1 | NADPH-dependent 7-cyano-7-deazaguanine reductase QueF | -0.601252 | |
| NHL66871.1 | DUF1857 family protein | -0.60393 | |
| NHL67213.1 | UDP-N-acetylmuramate dehydrogenase | -0.605465 | |
| NHL67131.1 | phosphoadenylyl-sulfate reductase | -0.606588 | |
| NHL69464.1 | aspartate carbamoyltransferase | -0.610907 | + |
| NHL65150.1 | glutathione S-transferase | -0.612889 | |
| NHL65065.1 | 50S ribosomal protein L16 | -0.613027 | |
| NHL65744.1 | 50S ribosomal protein L19 | -0.617872 | + |
| NHL67566.1 | enoyl-CoA hydratase/isomerase family protein | -0.61861 | |
| NHL65386.1 | bifunctional phosphoribosylaminoimidazolecarboxamide formyltransferase/IMP cyclohydrolase | -0.627487 | + |
| NHL66639.1 | tRNA adenosine(34) deaminase TadA | -0.62781 | |
| NHL68293.1 | argininosuccinate synthase | -0.628132 | + |
| NHL65069.1 | 50S ribosomal protein L24 | -0.629512 | |
| NHL66160.1 | translation initiation factor IF-2 | -0.631419 | |
| NHL65028.1 | orotate phosphoribosyltransferase | -0.637381 | |
| NHL66169.1 | 2-oxoglutarate dehydrogenase complex dihydrolipoyllysine-residue succinyltransferase | -0.639175 | + |
| NHL66214.1 | quinone-dependent dihydroorotate dehydrogenase | -0.640748 | + |
| NHL70137.1 | adenosyl-hopene transferase HpnH | -0.64169 | + |
| NHL66170.1 | dihydrolipoyl dehydrogenase | -0.643198 | + |
| NHL67388.1 | aspartate-tRNA ligase | -0.64365 | + |
| NHL66035.1 | bifunctional alpha/beta hydrolase/class I SAM-dependent methyltransferase | -0.645072 | |
| NHL67276.1 | response regulator | -0.647811 | |
| NHL66965.1 | septum formation inhibitor Maf | -0.65538 | |
| NHL69919.1 | DUF2167 domain-containing protein | -0.657019 | |
| NHL71031.1 | catalase HPII | -0.658463 | |
| NHL65029.1 | NADP-dependent malic enzyme | -0.659428 | + |
| NHL71055.1 | glucose 1-dehydrogenase | -0.660424 | |
| NHL65362.1 | adenylosuccinate lyase | -0.661016 | + |
| NHL66140.1 | 50S ribosomal protein L20 | -0.662329 | |
| NHL67514.1 | NAD(P)-dependent glycerol-3-phosphate dehydrogenase | -0.662361 | |
| NHL66673.1 | di-trans,poly-cis-decaprenylcistransferase | -0.662739 | |
| NHL70986.1 | TetR/AcrR family transcriptional regulator | -0.664031 | |
| NHL67292.1 | nuclear transport factor 2 family protein | -0.665399 | |
| NHL65781.1 | GTP 3.8-cyclase MoA | -0.668512 | |
| NHL67575.1 | cell division protein | -0.668695 | |
| NHL65304.1 | acetyl-CoA carboxylase biotin carboxylase subunit | -0.66904 | + |
| NHL70567.1 | GntR family transcriptional regulator | -0.670214 | |
| NHL67026.1 | rubredoxin | -0.671117 | |
| NHL70451.1 | ParB/RepB/SpoU family partition protein | -0.677198 | + |
| NHL68870.1 | porin | -0.679356 | |
| NHL65413.1 | tRNA preQ1(34) S-adenosylmethionine ribosyltransferase-isomerase QueA | -0.68025 | + |
| NHL67528.1 | accessory factor Ubik family protein | -0.683073 | |
| NHL65858.1 | ABC transporter substrate-binding protein | -0.68331 | |
| NHL68389.1 | Dyp-type peroxidase | -0.68993 | + |
| NHL64952.1 | 30S ribosomal protein S21 | -0.69309 | |
| NHL65073.1 | 50S ribosomal protein L6 | -0.696531 | + |
| NHL67660.1 | hypothetical protein EIB72_14855 | -0.699242 | |
| NHL66683.1 | cell division protein FtsZ | -0.699584 | |
| NHL65175.1 | tetratricopeptide repeat protein | -0.701633 | + |
| NHL67888.1 | GTP cyclohydrolase I FolE | -0.704826 | |
| NHL65235.1 | phosphoglycolate phosphatase | -0.707125 | |
| NHL65556.1 | aspartate carbamoyltransferase catalytic subunit | -0.707775 | + |
| NHL66663.1 | ribonuclease HII | -0.708842 | |
| NHL66488.1 | peptidoglycan DD-metalloendopeptidase family protein | -0.71019 | |
| NHL67574.1 | arginine-tRNA ligase | -0.711771 | + |
| NHL67291.1 | lipopolysaccharide heptosyltransferase II | -0.712218 | |
| NHL68083.1 | DUF2384 domain-containing protein | -0.717639 | |
| NHL66295.1 | lysine N(6)-hydroxylase/L-ornithine N(5)-oxygenase family protein | -0.718487 | |
| NHL68465.1 | GTP cyclohydrolase I FolE2 | -0.719213 | + |
| NHL66468.1 | adenylosuccinate synthase | -0.722314 | + |
| NHL66876.1 | hypothetical protein EIB72_10855 | -0.72277 | |
| NHL66776.1 | regulator | -0.723412 | |
| NHL67742.1 | class I SAM-dependent rRNA methyltransferase | -0.724148 | |
| NHL67084.1 | argininosuccinate lyase | -0.726687 | |
| NHL65089.1 | YihA family ribosome biogenesis GTP-binding protein | -0.727527 | |

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|------------|--|-----------|---|
| NHL65394.1 | NUDIX hydrolase | -0.727951 | |
| NHL67455.1 | RNA polymerase factor sigma-54 | -0.732241 | |
| NHL67381.1 | enoyl-CoA hydratase | -0.733907 | |
| NHL66877.1 | exinuclease ABC subunit UvrB | -0.735997 | |
| NHL66927.1 | phosphatidylserine decarboxylase | -0.737036 | |
| NHL67826.1 | DNA topoisomerase (ATP-hydrolyzing) subunit B | -0.737513 | + |
| NHL67398.1 | DUF3683 domain-containing protein | -0.738441 | |
| NHL66647.1 | glutamine-hydrolyzing GMP synthase | -0.738815 | + |
| NHL66963.1 | ribosome silencing factor | -0.741564 | |
| NHL69093.1 | virulence factor family protein | -0.743846 | |
| NHL65770.1 | CreA family protein | -0.749414 | |
| NHL69927.1 | MetQ/NlpA family ABC transporter substrate-binding protein | -0.751099 | |
| NHL65401.1 | membrane integrity-associated transporter subunit PqIC | -0.754014 | |
| NHL66114.1 | NAD(P)H:quinone oxidoreductase | -0.754391 | |
| NHL67373.1 | phosphotransferase | -0.761168 | + |
| NHL69737.1 | formaldehyde dehydrogenase, glutathione-independent | -0.762255 | |
| NHL65090.1 | cytochrome c4 | -0.768461 | |
| NHL65743.1 | tRNA (guanosine(37)-N1)-methyltransferase TrmD | -0.771436 | |
| NHL65332.1 | barstar family protein | -0.77213 | |
| NHL65652.1 | GNAT family N-acetyltransferase | -0.772945 | |
| NHL69335.1 | cold-shock protein | -0.777128 | + |
| NHL65564.1 | mannose-1-phosphate guanylyltransferase/mannose-6-phosphate isomerase | -0.777683 | + |
| NHL66462.1 | ATP-dependent DNA helicase | -0.780949 | + |
| NHL66734.1 | aspartate kinase | -0.781659 | |
| NHL66607.1 | presqualene diphosphate synthase Hpnd | -0.782666 | |
| NHL67635.1 | dihydronoepterin aldolase | -0.783596 | |
| NHL70006.1 | SDR family NAD(P) dependent oxidoreductase | -0.78389 | |
| NHL64931.1 | UvrD-helicase domain-containing protein | -0.78529 | |
| NHL65052.1 | DNA helicase RecQ | -0.787158 | |
| NHL67957.1 | hypothetical protein EIB72_16375 | -0.788246 | + |
| NHL65412.1 | tRNA guanosine(34) transglycosylase Tgt | -0.789856 | |
| NHL67085.1 | HAD family phosphatase | -0.791915 | + |
| NHL66101.1 | UvrD-helicase domain-containing protein | -0.801937 | |
| NHL71142.1 | hypothetical protein EIB72_32715 | -0.802211 | |
| NHL67384.1 | acyl-CoA dehydrogenase | -0.803399 | + |
| NHL65206.1 | Ubix family flavin prenyltransferase | -0.804282 | |
| NHL68453.1 | hypothetical protein EIB72_18905 | -0.807806 | |
| NHL67646.1 | aldehyde dehydrogenase | -0.811364 | + |
| NHL67052.1 | hypothetical protein EIB72_11780 | -0.813129 | |
| NHL67473.1 | signal recognition particle-docking protein FtsY | -0.81344 | |
| NHL65803.1 | elongation factor 4 | -0.819765 | + |
| NHL69062.1 | cold-shock protein | -0.826233 | |
| NHL65833.1 | glycosyltransferase family 4 protein | -0.831856 | + |
| NHL65420.1 | pyrroline-5-carboxylate reductase | -0.832268 | |
| NHL71144.1 | bifunctional aconitate hydratase 2/-methylisocitrate dehydratase | -0.83375 | + |
| NHL67824.1 | chromosomal replication initiator protein DnaA | -0.837533 | |
| NHL66751.1 | peptidylprolyl isomerase | -0.84155 | |
| NHL66852.1 | hypothetical protein EIB72_10735 | -0.844104 | |
| NHL65804.1 | signal peptidase I | -0.844432 | |
| NHL68472.1 | RNA polymerase sigma factor RpoB | -0.848581 | + |
| NHL68562.1 | site-specific DNA-methyltransferase | -0.861609 | |
| NHL69746.1 | betaine-aldehyde dehydrogenase | -0.862867 | + |
| NHL67149.1 | GNAT family acetyltransferase | -0.868083 | |
| NHL66464.1 | hypothetical protein EIB72_08700 | -0.868552 | |
| NHL67057.1 | ABC transporter substrate-binding protein | -0.873631 | |
| NHL71032.1 | DUF3022 domain-containing protein | -0.87587 | |
| NHL65563.1 | dTDP-4-dehydrorhamnose reductase | -0.880985 | |
| NHL67362.1 | glycine-tRNA ligase subunit alpha | -0.886421 | |
| NHL66568.1 | AIPR family protein | -0.887604 | |
| NHL67494.1 | MetQ/NlpA family ABC transporter substrate-binding protein | -0.889715 | + |
| NHL70609.1 | transporter substrate-binding domain-containing protein | -0.891418 | |
| NHL69547.1 | bifunctional nicotinamide-nucleotide adenylyltransferase/Nudix hydrolase | -0.894004 | |
| NHL66796.1 | dihydrolipoyl dehydrogenase | -0.897363 | + |
| NHL65334.1 | glyoxalase/bleomycin resistance/extradiol dioxygenase family protein | -0.900736 | |
| NHL65709.1 | phosphoglycolate phosphatase | -0.904579 | |
| NHL65457.1 | DNA mismatch repair endonuclease MutL | -0.90465 | + |
| NHL67397.1 | HIT family protein | -0.907289 | |
| NHL65761.1 | acyl-CoA thioesterase | -0.919028 | |
| NHL70447.1 | adenylosuccinate synthase | -0.920397 | |
| NHL66980.1 | sulfurtransferase | -0.922164 | + |
| NHL66210.1 | FadR family transcriptional regulator | -0.922576 | |
| NHL67159.1 | SOS ribosomal protein L28 | -0.924743 | + |
| NHL64876.1 | 16S rRNA (guanine(527)-N(7))-methyltransferase RsmG | -0.924771 | |
| NHL66381.1 | DUF3022 domain-containing protein | -0.928651 | |
| NHL68041.1 | copper oxidase | -0.928884 | + |
| NHL66305.1 | cob(I)yrinic acid a,c-diamide adenosyltransferase | -0.932419 | |
| NHL67015.1 | RidA family protein | -0.937407 | |
| NHL68105.1 | aromatic alcohol reductase | -0.943359 | |
| NHL64933.1 | DUF2971 domain-containing protein | -0.949828 | + |
| NHL65117.1 | sulfur carrier protein ThiS | -0.950296 | |
| NHL65647.1 | replication-associated recombination protein A | -0.951735 | + |
| NHL66522.1 | Xcc1710-like domain-containing protein | -0.952043 | |
| NHL66552.1 | AAA family ATPase | -0.953561 | |
| NHL68947.1 | delta(1)-pyrroline-2-carboxylate reductase family protein | -0.955568 | |
| NHL68123.1 | co-chaperone GroES | -0.956493 | + |
| NHL69039.1 | alcohol dehydrogenase AdhP | -0.957526 | + |
| NHL68037.1 | heavy metal response regulator transcription factor | -0.960819 | |
| NHL69413.1 | dicarboxylate/amino acid:cation symporter | -0.961175 | + |
| NHL68686.1 | alkyl hydroperoxide reductase subunit F | -0.962978 | |
| NHL64813.1 | site-specific DNA-methyltransferase | -0.964589 | + |
| NHL68799.1 | NAD(P)/FAD-dependent oxidoreductase | -0.967255 | |
| NHL67798.1 | phosphonoacetate hydrolase | -0.975357 | + |
| NHL66649.1 | IMP dehydrogenase | -0.977537 | + |
| NHL66511.1 | helix-hairpin-helix domain-containing protein | -0.980288 | |
| NHL65209.1 | peptide chain release factor 1 | -0.987919 | |
| NHL66323.1 | precorrin-2 C(20)-methyltransferase | -0.991252 | + |
| NHL68797.1 | exinuclease ABC subunit A | -0.99604 | + |
| NHL65236.1 | ribulose-phosphate 3-epimerase | -0.996721 | + |

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|-----------------------|--|----------|---|
| NHL66979.1 | DNA polymerase III subunit alpha | -0.99818 | |
| NHL69663.1 | DcrB-related protein | -1.00421 | |
| NHL66777.1 | single-stranded-DNA-specific exonuclease RecJ | -1.00567 | + |
| NHL67468.1 | aminoacyl-tRNA hydrolase | -1.01116 | |
| NHL65410.1 | protein translocase subunit SecD | -1.01943 | |
| NHL67160.1 | 50S ribosomal protein L33 | -1.02609 | |
| NHL67563.1:NHL70599.1 | ferritin-like domain-containing protein | -1.02623 | + |
| NHL71040.1 | hypothetical protein EIB72_32205 | -1.03437 | |
| NHL65671.1 | transcription elongation factor GreB | -1.04332 | |
| NHL66147.1 | outer membrane protein assembly factor BamC | -1.04499 | + |
| NHL66437.1 | ABC-F family ATPase | -1.05819 | + |
| NHL68787.1 | aromatic amino acid lyase | -1.06209 | |
| NHL65296.1 | ribonucleotide-diphosphate reductase subunit beta | -1.06892 | + |
| NHL66168.1 | 2-oxoglutarate dehydrogenase E1 component | -1.07553 | + |
| NHL66354.1 | alpha/beta hydrolase | -1.08747 | + |
| NHL67396.1 | DUF971 domain-containing protein | -1.08891 | |
| NHL67349.1 | HAD-IA family hydrolase | -1.08893 | |
| NHL65299.1 | glycine zipper 2TM domain-containing protein | -1.09288 | |
| NHL66688.1 | ArsC family reductase | -1.09696 | + |
| NHL71077.1 | chemotaxis protein | -1.09836 | + |
| NHL66459.1 | peptidoglycan editing factor PgeF | -1.09884 | |
| NHL65280.1 | 50S ribosomal protein L27 | -1.10735 | + |
| NHL65821.1 | ParD-like family protein | -1.11123 | + |
| NHL66127.1 | PAS and helix-turn-helix domain-containing protein | -1.11264 | + |
| NHL66704.1 | DEAD/DEAH box helicase | -1.12116 | |
| NHL69965.1 | amidohydrolase | -1.12413 | |
| NHL71081.1 | FAD-dependent oxidoreductase | -1.13565 | |
| NHL66939.1 | TIGR00730 family Rossman fold protein | -1.13758 | + |
| NHL70878.1 | LuxR family transcriptional regulator | -1.13971 | |
| NHL66164.1 | HlyD family efflux transporter periplasmic adaptor subunit | -1.14958 | |
| NHL68260.1 | fucose-binding lectin protein | -1.15188 | |
| NHL70683.1 | response regulator | -1.15503 | |
| NHL67111.1 | nicotinate-nucleotide-dimethylbenzimidazole phosphoribosyltransferase | -1.1554 | + |
| NHL65499.1 | transcriptional repressor NrdR | -1.16124 | |
| NHL66914.1 | NADH-quinone oxidoreductase subunit B | -1.16342 | |
| NHL69526.1 | diaminopimelate decarboxylase | -1.1648 | + |
| NHL64925.1 | aminomethyl-transferring glycine dehydrogenase | -1.16839 | + |
| NHL64882.1 | FOF1 ATP synthase subunit C | -1.16847 | |
| NHL68583.1 | porin | -1.17861 | |
| NHL67221.1 | tRNA (adenosine(37)-N6)-threonylcarbamoyltransferase complex ATPase subunit type 1 | -1.18005 | |
| NHL69956.1 | 4-aminobutyrate-2-oxoglutarate transaminase | -1.18535 | |
| NHL67627.1 | phosphodiesterase | -1.19044 | |
| NHL70221.1 | response regulator | -1.1936 | |
| NHL66995.1 | DUF1841 family protein | -1.21135 | |
| NHL68558.1 | plus assembly protein FimV | -1.21212 | |
| NHL66851.1 | type VI secretion system tip protein VgrG | -1.21708 | + |
| NHL64996.1 | 16S rRNA (cytidine(1402)-2'-O)-methyltransferase | -1.24587 | |
| NHL71070.1 | carbamoyltransferase | -1.24789 | |
| NHL66812.1 | competence/damage-inducible protein A | -1.25719 | + |
| NHL70892.1 | thioesterase | -1.2693 | |
| NHL67549.1 | D-alanyl-D-alanine carboxypeptidase | -1.28058 | + |
| NHL66700.1 | uracil-DNA glycosylase | -1.28079 | + |
| NHL64994.1 | MBL fold metallo-hydrolase | -1.28271 | |
| NHL67192.1 | EAL domain-containing protein | -1.29529 | |
| NHL67224.1 | pirin family protein | -1.30806 | |
| NHL68094.1 | BON domain-containing protein | -1.3163 | + |
| NHL70251.1 | SDR family oxidoreductase | -1.31973 | + |
| NHL65498.1 | serine hydroxymethyltransferase | -1.32205 | |
| NHL67882.1 | fumarate/nitrate reduction transcriptional regulator Fnr | -1.3247 | + |
| NHL68713.1 | prolyl aminopeptidase | -1.32815 | |
| NHL66322.1 | precorrin-3B C(17)-methyltransferase | -1.33184 | + |
| NHL65384.1 | Holliday junction branch migration protein RuvA | -1.33508 | |
| NHL67327.1 | galactonate dehydratase | -1.34195 | |
| NHL70967.1 | alkylphosphonate utilization protein | -1.35105 | + |
| NHL69957.1 | NADP-dependent succinate-semialdehyde dehydrogenase | -1.36643 | |
| NHL68500.1 | peptidoglycan DD-metalloendopeptidase family protein | -1.37966 | + |
| NHL68954.1 | DUF1311 domain-containing protein | -1.42494 | |
| NHL66907.1 | NADH-quinone oxidoreductase subunit Nuol | -1.44212 | |
| NHL67280.1 | threonylcarbamoyl-AMP synthase | -1.44336 | |
| NHL65951.1 | transglycosylase SLT domain-containing protein | -1.44913 | + |
| NHL71003.1 | hypothetical protein EIB72_32020 | -1.45705 | |
| NHL71059.1 | BON domain-containing protein | -1.46244 | |
| NHL65282.1 | glutamate 5-kinase | -1.47445 | + |
| NHL66308.1 | cobalamin biosynthesis protein CobW | -1.47778 | + |
| NHL67356.1 | rRNA maturation RNase YbeY | -1.49636 | |
| NHL68461.1 | aromatic ring-hydroxylating dioxygenase subunit alpha | -1.50129 | + |
| NHL64943.1 | tetraricopeptide repeat protein | -1.50406 | + |
| NHL70134.1 | PAAR domain-containing protein | -1.5041 | |
| NHL71080.1 | glutathione-dependent formaldehyde dehydrogenase | -1.5083 | + |
| NHL68687.1 | peroxiredoxin | -1.51846 | + |
| NHL66888.1 | hypothetical protein EIB72_10935 | -1.53886 | |
| NHL66853.1 | hypothetical protein EIB72_10740 | -1.54139 | |
| NHL68847.1 | ABC transporter ATP-binding protein | -1.56119 | + |
| NHL66632.1 | allantocidase | -1.56493 | |
| NHL69027.1 | recombination-associated protein RdgC | -1.57271 | |
| NHL66563.1 | alpha/beta hydrolase | -1.59948 | |
| NHL65368.1 | amino acid ABC transporter ATP-binding protein | -1.59991 | + |
| NHL68830.1 | c-type cytochrome | -1.60282 | |
| NHL67644.1 | cupredoxin domain-containing protein | -1.60578 | |
| NHL71125.1 | hypothetical protein EIB72_32630 | -1.66128 | |
| NHL68908.1 | aspartate aminotransferase family protein | -1.6782 | + |
| NHL68160.1 | Hsp70 family protein | -1.6784 | |
| NHL64927.1 | glycine cleavage system aminomethyltransferase GcvT | -1.69377 | |
| NHL65885.1 | exodeoxyribonuclease V subunit beta | -1.72146 | + |
| NHL69923.1 | hypothetical protein EIB72_26475 | -1.7596 | |
| NHL68794.1 | beta-ketoacyl-ACP synthase | -1.77083 | + |
| NHL64812.1 | DEAD/DEAH box helicase family protein | -1.78194 | + |
| NHL65265.1 | UDP-3-O-acetyl-N-acetylglucosamine deacetylase | -1.78202 | |

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| NHL67172.1 | dUTP diphosphatase | -1.82987 | |
| NHL66190.1 | DUF2968 domain-containing protein | -1.85575 | |
| NHL66083.1 | sugar ABC transporter substrate-binding protein | -1.88004 | |
| NHL68026.1 | trans-aconitate 2-methyltransferase | -1.89573 | |
| NHL65550.1 | hydroxymethylpyrimidine/phosphomethylpyrimidine kinase | -1.90308 | |
| NHL66217.1 | NUDIX hydrolase | -1.92013 | |
| NHL66798.1 | pyruvate dehydrogenase (acetyl-transferring), homodimeric type | -1.93717 | + |
| NHL68849.1 | ABC transporter substrate-binding protein | -2.04183 | + |
| NHL65799.1 | sigma-E factor negative regulatory protein | -2.04931 | + |
| NHL69702.1 | peptidase | -2.13943 | + |
| NHL66309.1 | cobaltochelatase subunit CobN | -2.14868 | |
| NHL71054.1 | DUF4142 domain-containing protein | -2.21782 | + |
| NHL71053.1 | DUF892 family protein | -2.24272 | + |
| NHL65451.1 | DnaA regulatory inactivator Hda | -2.25132 | + |
| NHL69933.1 | alpha/beta hydrolase | -2.2548 | + |
| NHL66222.1 | FMNH2-dependent alkanesulfonate monooxygenase | -2.29798 | + |
| NHL67522.1 | HPr family phosphocarrier protein | -2.31396 | + |
| NHL68559.1 | tRNA pseudouridine(38-40) synthase TruA | -2.3246 | + |
| NHL65331.1 | ribonuclease | -2.34891 | |
| NHL68869.1 | squalene/phytoene synthase family protein | -2.34956 | + |
| NHL66794.1 | D-alanyl-D-alanine endopeptidase | -2.39734 | + |
| NHL65584.1 | 3-deoxy-D-manno-oct-2-ulosonic acid (Kdo) hydroxylase | -2.49549 | |
| NHL67350.1 | 3,4-dihydroxy-2-butanone-4-phosphate synthase | -2.50192 | + |
| NHL65010.1 | DUF2239 family protein | -2.50311 | |
| NHL65486.1 | hypothetical protein EIB72_03630 | -2.51645 | + |
| NHL69929.1 | 2-hydroxycarboxylate transporter family protein | -2.56698 | + |
| NHL64999.1 | BON domain-containing protein | -2.69355 | + |
| NHL65306.1 | type II 3-dehydroquinate dehydratase | -2.88405 | + |
| NHL70247.1 | DUF1842 domain-containing protein | -2.90351 | |
| NHL71057.1 | DUF2795 domain-containing protein | -2.92453 | + |
| NHL64947.1;NHL64946.1 | tetratricopeptide repeat protein | -3.12401 | + |
| NHL69414.1 | gamma-glutamyltransferase | -3.24421 | + |
| NHL69931.1 | sigma-54-dependent Fis family transcriptional regulator | -3.43161 | + |
| NHL71042.1 | PRC-barrel domain containing protein | -3.49615 | + |
| NHL68782.1 | acyl carrier protein | -3.63042 | + |
| NHL69690.1 | NADP-dependent malic enzyme | -3.71373 | + |
| NHL71010.1 | maltose alpha-D-glucosyltransferase | -3.87764 | + |
| NHL66148.1 | DNA-binding protein | -4.03791 | + |
| NHL65076.1 | 50S ribosomal protein L30 | -4.20745 | |
| NHL67274.1 | DegQ family serine endoprotease | -5.45983 | + |
| NHL68043.1 | copper homeostasis periplasmic binding protein CopC | -5.76143 | + |
| NHL67420.1 | M48 family metalloprotease | -6.05311 | + |
| NHL68042.1 | copper-binding protein | -6.43107 | + |

A Biosynthesis



B Degradation

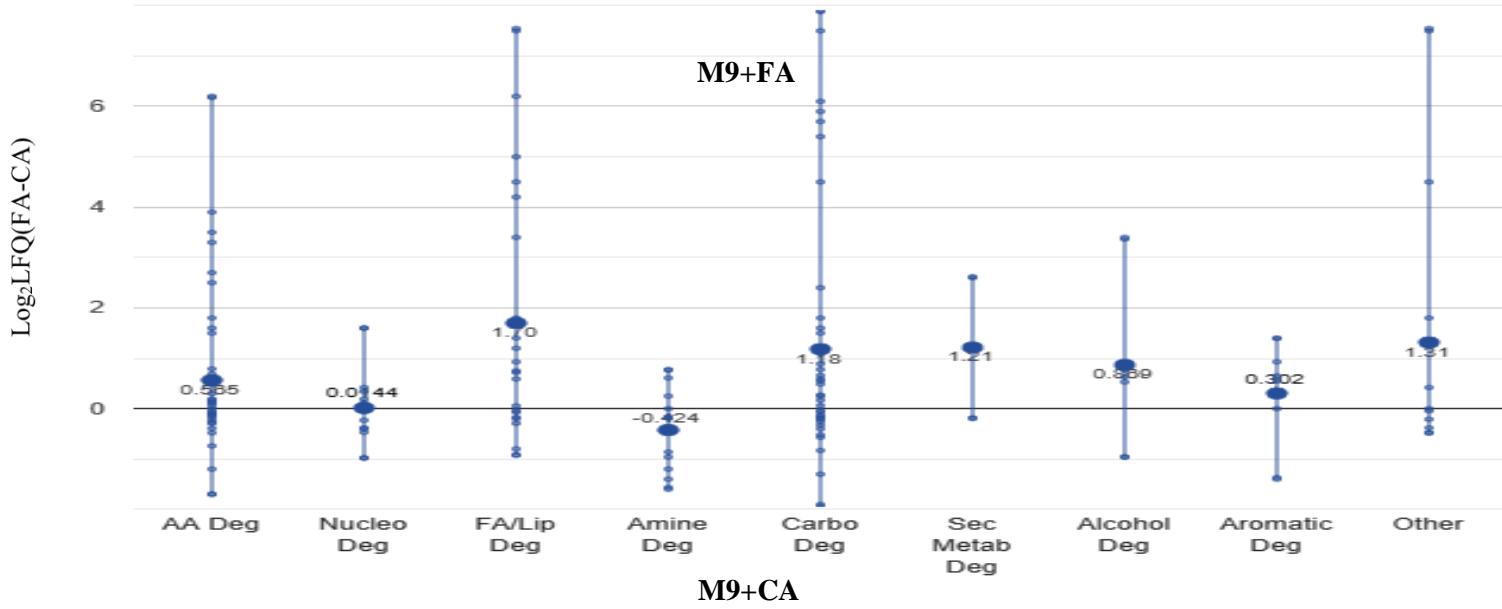


FIG S1 Difference in the abundance of proteins belonging to different metabolic pathways during the cultivation of *B. ambifaria* T16 in M9 minimal medium with fusaric acid (M9+FA) or sodium citrate (M9+CA) as the sole carbon source. Each of the small dots represents a data value (log₂LFQ[FA-CA]) for an individual protein within the

metabolic pathway. The line connecting them shows the full range of values for that metabolic pathway. **A.** Metabolic pathways for Biosynthesis: AA: amino acids, Nucleo: nucleotides and nucleosides, FA/Lip: fatty acids and lipids, Amine: amines and polyamines, Carbo: Carbohydrates, Sec Metab: Secondary Metabolites, Cell-struct: Cell structure, Metab Reg: Metabolic Regulator. **B.** Metabolic pathways for Degradation: Carbo: carbohydrates and carboxylates degradation, Aromatic: aromatic compounds. The Proteomic dataset was uploaded in the PGDB of *B. ambifaria* T16 and visualized with the Pathway Tools Omics Dashboard.

TABLE S2 Evaluation of *B. ambifaria* growth in the presence of toluene

| <i>B. ambifaria</i> strain | Final OD₆₀₀¹ |
|---|---|
| T16 (wild type) | 1.75 ± 0.096 |
| FA3 (<i>mlaD</i> ::mini-Tn5Tel) | 0.56 ± 0.03 |

¹Cultures were grown during 24 h in screw capped tubes containing M9 minimal medium with 0.2% (wt/vol) sodium citrate and 6 mM toluene. Means ± SD of three independent cultures are shown.

TABLE S3 Sensitivity to SDS/EDTA of *B. ambifaria* strains

| <i>B. ambifaria</i> strain | Growth in 0.5% | Growth in 0.5% | Growth in 0.5% |
|---|-------------------------|-------------------------|-------------------------|
| | SDS + 0.5 mM | SDS + 1 mM | SDS + 1.5 mM |
| | EDTA¹ | EDTA¹ | EDTA¹ |
| T16 (wild type) | + | + | + |
| FA3 (<i>mlaD</i> ::mini-Tn5Tel) | - | - | - |

¹Growth was evaluated in LB agar plates containing SDS + EDTA according to Yeow et al. (1).

References

1. Yeow J, Tan KW, Holdbrook DA, Chong Z-S, Marzinek JK, Bond PJ, Chng S-S. 2018. The architecture of the OmpC-MlaA complex sheds light on the maintenance of outer membrane lipid asymmetry in *Escherichia coli*. *J Biol Chem* 293:11325-11340.