

Table S1. Cytosol proteins. Microsoft Excel Ontology KASS KEGG analysis of *Bacillus pumilus* UAMX.

[00010 Glycolysis / Gluconeogenesis \(8\)](#)
[00020 Citrate cycle \(TCA cycle\) \(3\)](#)
[00030 Pentose phosphate pathway \(2\)](#)
[00051 Fructose and mannose metabolism \(2\)](#)
[00053 Ascorbate and aldarate metabolism \(1\)](#)
[00061 Fatty acid biosynthesis \(1\)](#)
[00071 Fatty acid degradation \(1\)](#)
[00130 Ubiquinone and other terpenoid-quinone biosynthesis \(1\)](#)
[00190 Oxidative phosphorylation \(3\)](#)
[00195 Photosynthesis \(2\)](#)
[00220 Arginine biosynthesis \(1\)](#)
[00230 Purine metabolism \(7\)](#)
[00240 Pyrimidine metabolism \(2\)](#)
[00250 Alanine, aspartate and glutamate metabolism \(3\)](#)
[00260 Glycine, serine and threonine metabolism \(1\)](#)
[00261 Monobactam biosynthesis \(1\)](#)
[00270 Cysteine and methionine metabolism \(3\)](#)
[00280 Valine, leucine and isoleucine degradation \(1\)](#)
[00310 Lysine degradation \(1\)](#)
[00330 Arginine and proline metabolism \(1\)](#)
[00333 Prodigiosin biosynthesis \(1\)](#)
[00340 Histidine metabolism \(1\)](#)
[00380 Tryptophan metabolism \(1\)](#)
[00400 Phenylalanine, tyrosine and tryptophan biosynthesis \(1\)](#)
[00410 beta-Alanine metabolism \(1\)](#)
[00430 Taurine and hypotaurine metabolism \(1\)](#)
[00450 Selenocompound metabolism \(5\)](#)
[00480 Glutathione metabolism \(1\)](#)
[00520 Amino sugar and nucleotide sugar metabolism \(2\)](#)
[00561 Glycerolipid metabolism \(3\)](#)
[00564 Glycerophospholipid metabolism \(1\)](#)
[00620 Pyruvate metabolism \(5\)](#)
[00625 Chloroalkane and chloroalkene degradation \(1\)](#)
[00630 Glyoxylate and dicarboxylate metabolism \(2\)](#)
[00640 Propanoate metabolism \(1\)](#)
[00650 Butanoate metabolism \(1\)](#)
[00670 One carbon pool by folate \(1\)](#)
[00680 Methane metabolism \(4\)](#)
[00710 Carbon fixation in photosynthetic organisms \(2\)](#)
[00720 Carbon fixation pathways in prokaryotes \(3\)](#)
[00730 Thiamine metabolism \(1\)](#)
[00750 Vitamin B6 metabolism \(1\)](#)
[00760 Nicotinate and nicotinamide metabolism \(1\)](#)
[00770 Pantothenate and CoA biosynthesis \(1\)](#)
[00780 Biotin metabolism \(1\)](#)
[00790 Folate biosynthesis \(1\)](#)
[00860 Porphyrin and chlorophyll metabolism \(1\)](#)
[00903 Limonene and pinene degradation \(1\)](#)
[00910 Nitrogen metabolism \(1\)](#)
[00920 Sulfur metabolism \(1\)](#)
[00970 Aminoacyl-tRNA biosynthesis \(9\)](#)
[00981 Insect hormone biosynthesis \(1\)](#)
[00983 Drug metabolism - other enzymes \(2\)](#)
[01054 Nonribosomal peptide structures \(1\)](#)
[01501 beta-Lactam resistance \(1\)](#)
[02010 ABC transporters \(2\)](#)
[02020 Two-component system \(2\)](#)
[02024 Quorum sensing \(3\)](#)
[02040 Flagellar assembly \(2\)](#)
[02060 Phosphotransferase system \(PTS\) \(2\)](#)
[03010 Ribosome \(10\)](#)
[03018 RNA degradation \(3\)](#)
[03020 RNA polymerase \(3\)](#)
[03030 DNA replication \(1\)](#)
[03060 Protein export \(1\)](#)
[03070 Bacterial secretion system \(1\)](#)

[03320 PPAR signaling pathway \(1\)](#)
[03420 Nucleotide excision repair \(1\)](#)
[03440 Homologous recombination \(1\)](#)
[04066 HIF-1 signaling pathway \(2\)](#)
[04112 Cell cycle - Caulobacter \(3\)](#)
[04122 Sulfur relay system \(1\)](#)
[04212 Longevity regulating pathway - worm \(2\)](#)
[04217 Necroptosis \(1\)](#)
[04626 Plant-pathogen interaction \(2\)](#)
[04724 Glutamatergic synapse \(1\)](#)
[04727 GABAergic synapse \(1\)](#)
[04922 Glucagon signaling pathway \(1\)](#)
[04930 Type II diabetes mellitus \(1\)](#)
[04931 Insulin resistance \(1\)](#)
[04940 Type I diabetes mellitus \(1\)](#)
[05010 Alzheimer disease \(1\)](#)
[05130 Pathogenic Escherichia coli infection \(1\)](#)
[05132 Salmonella infection \(1\)](#)
[05134 Legionellosis \(2\)](#)
[05152 Tuberculosis \(2\)](#)
[05165 Human papillomavirus infection \(1\)](#)
[05203 Viral carcinogenesis \(1\)](#)
[05230 Central carbon metabolism in cancer \(1\)](#)
[05415 Diabetic cardiomyopathy \(2\)](#)
[05417 Lipid and atherosclerosis \(1\)](#)

Table S2. Membrane proteins. Cytosol proteins. Microsoft Excel Ontology KASS KEGG analysis of *Bacillus pumilus* UAMX.

[00010 Glycolysis / Gluconeogenesis \(14\)](#)
[00020 Citrate cycle \(TCA cycle\) \(11\)](#)
[00030 Pentose phosphate pathway \(7\)](#)
[00040 Pentose and glucuronate interconversions \(1\)](#)
[00051 Fructose and mannose metabolism \(3\)](#)
[00052 Galactose metabolism \(2\)](#)
[00053 Ascorbate and aldarate metabolism \(1\)](#)
[00061 Fatty acid biosynthesis \(2\)](#)
[00071 Fatty acid degradation \(1\)](#)
[00130 Ubiquinone and other terpenoid-quinone biosynthesis \(1\)](#)
[00190 Oxidative phosphorylation \(5\)](#)
[00195 Photosynthesis \(2\)](#)
[00220 Arginine biosynthesis \(1\)](#)
[00230 Purine metabolism \(9\)](#)
[00240 Pyrimidine metabolism \(5\)](#)
[00250 Alanine, aspartate and glutamate metabolism \(4\)](#)
[00260 Glycine, serine and threonine metabolism \(6\)](#)
[00261 Monobactam biosynthesis \(1\)](#)
[00270 Cysteine and methionine metabolism \(4\)](#)
[00280 Valine, leucine and isoleucine degradation \(3\)](#)
[00290 Valine, leucine and isoleucine biosynthesis \(2\)](#)
[00310 Lysine degradation \(3\)](#)
[00330 Arginine and proline metabolism \(1\)](#)
[00333 Prodigiosin biosynthesis \(1\)](#)
[00340 Histidine metabolism \(1\)](#)
[00380 Tryptophan metabolism \(3\)](#)
[00400 Phenylalanine, tyrosine and tryptophan biosynthesis \(2\)](#)
[00410 beta-Alanine metabolism \(1\)](#)
[00430 Taurine and hypotaurine metabolism \(2\)](#)
[00450 Selenocompound metabolism \(5\)](#)
[00480 Glutathione metabolism \(3\)](#)
[00500 Starch and sucrose metabolism \(3\)](#)
[00520 Amino sugar and nucleotide sugar metabolism \(4\)](#)
[00541 O-Antigen nucleotide sugar biosynthesis \(1\)](#)
[00561 Glycerolipid metabolism \(4\)](#)
[00564 Glycerophospholipid metabolism \(2\)](#)
[00620 Pyruvate metabolism \(12\)](#)
[00625 Chloroalkane and chloroalkene degradation \(1\)](#)
[00630 Glyoxylate and dicarboxylate metabolism \(5\)](#)
[00640 Propanoate metabolism \(9\)](#)
[00650 Butanoate metabolism \(3\)](#)
[00660 C5-Branched dibasic acid metabolism \(3\)](#)
[00670 One carbon pool by folate \(1\)](#)
[00680 Methane metabolism \(6\)](#)
[00710 Carbon fixation in photosynthetic organisms \(3\)](#)
[00720 Carbon fixation pathways in prokaryotes \(9\)](#)
[00730 Thiamine metabolism \(1\)](#)
[00750 Vitamin B6 metabolism \(1\)](#)
[00760 Nicotinate and nicotinamide metabolism \(2\)](#)
[00770 Pantothenate and CoA biosynthesis \(3\)](#)
[00780 Biotin metabolism \(1\)](#)
[00785 Lipoic acid metabolism \(1\)](#)
[00790 Folate biosynthesis \(1\)](#)
[00860 Porphyrin and chlorophyll metabolism \(2\)](#)

[00903 Limonene and pinene degradation \(1\)](#)
[00910 Nitrogen metabolism \(1\)](#)
[00920 Sulfur metabolism \(1\)](#)
[00970 Aminoacyl-tRNA biosynthesis \(11\)](#)
[00981 Insect hormone biosynthesis \(1\)](#)
[00983 Drug metabolism - other enzymes \(2\)](#)
[01051 Biosynthesis of ansamycins \(1\)](#)
[01054 Nonribosomal peptide structures \(1\)](#)
[01501 beta-Lactam resistance \(1\)](#)
[02010 ABC transporters \(3\)](#)
[02020 Two-component system \(8\)](#)
[02024 Quorum sensing \(6\)](#)
[02040 Flagellar assembly \(2\)](#)
[02060 Phosphotransferase system \(PTS\) \(3\)](#)
[03010 Ribosome \(19\)](#)
[03013 RNA transport \(1\)](#)
[03018 RNA degradation \(6\)](#)
[03020 RNA polymerase \(3\)](#)
[03030 DNA replication \(2\)](#)
[03060 Protein export \(2\)](#)
[03070 Bacterial secretion system \(2\)](#)
[03320 PPAR signaling pathway \(1\)](#)
[03420 Nucleotide excision repair \(2\)](#)
[03430 Mismatch repair \(3\)](#)
[03440 Homologous recombination \(3\)](#)
[04066 HIF-1 signaling pathway \(6\)](#)
[04112 Cell cycle - Caulobacter \(4\)](#)
[04122 Sulfur relay system \(1\)](#)
[04146 Peroxisome \(1\)](#)
[04152 AMPK signaling pathway \(1\)](#)
[04212 Longevity regulating pathway - worm \(2\)](#)
[04217 Necroptosis \(1\)](#)
[04626 Plant-pathogen interaction \(2\)](#)
[04724 Glutamatergic synapse \(1\)](#)
[04727 GABAergic synapse \(1\)](#)
[04919 Thyroid hormone signaling pathway \(1\)](#)
[04922 Glucagon signaling pathway \(5\)](#)
[04930 Type II diabetes mellitus \(1\)](#)
[04931 Insulin resistance \(1\)](#)
[04940 Type I diabetes mellitus \(1\)](#)
[05010 Alzheimer disease \(1\)](#)
[05130 Pathogenic Escherichia coli infection \(1\)](#)
[05132 Salmonella infection \(1\)](#)
[05134 Legionellosis \(3\)](#)
[05152 Tuberculosis \(2\)](#)
[05165 Human papillomavirus infection \(1\)](#)
[05203 Viral carcinogenesis \(1\)](#)
[05230 Central carbon metabolism in cancer \(7\)](#)
[05415 Diabetic cardiomyopathy \(5\)](#)
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