```
PWY-7184: pyrimidine deoxyribonucleotides de novo biosynthesis I PWY-6121: 5-aminoimidazole ribonucleotide biosynthesis I
                                                                                                                             PWY-6121: 5-aminoimidazole ribonucleotide biosynthesis I
PWY-6122: 5-aminoimidazole ribonucleotide biosynthesis II
PWY-6277: superpathway of 5-aminoimidazole ribonucleotide biosynthesis
PWY-3001: superpathway of L-isoleucine biosynthesis I
PWY-5686: UMP biosynthesis
PWY-841: superpathway of purine nucleotides de novo biosynthesis I
CALVIN-PWY: Calvin-Benson-Bassham cycle
PWY0-166: superpathway of pyrimidine deoxyribonucleotides de novo biosynthesis (E. coli)
PWY-7229: superpathway of adenosine nucleotides de novo biosynthesis I
                                                                                                                               PWY-7229: superpathway of adenosine nucleotides de novo biosynthesis I THRESYN-PWY: superpathway of L-threonine biosynthesis
                                                                                                                           THRESYN-PWY: superpathway of L-threonine biosynthesis
PWY-7208: superpathway of pyrimidine nucleobases salvage
COA-PWY-1: coenzyme A biosynthesis II (mammalian)
PEPTIDOGLYCANSYN-PWY: peptidoglycan biosynthesis I (meso-diaminopimelate containing)
PWY-6387: UDP-N-acetylmuramoyl-pentapeptide biosynthesis I (meso-diaminopimelate containing)
PWY-7197: pyrimidine deoxyribonucleotide phosphorylation
PWY-4242: pantothenate and coenzyme A biosynthesis III
PWY-6386: UDP-N-acetylmuramoyl-pentapeptide biosynthesis II (lysine-containing)
PWY-5667: CDP-diacylglycerol biosynthesis I
PWY0-1319: CDP-diacylglycerol biosynthesis II
PWY0-162: superpathway of pyrimidine ribonucleotides de novo biosynthesis
ILEUSYN-PWY: L-isoleucine biosynthesis I (from threonine)
NONMEVIPP-PWY: methylerythritol phosphate pathway I
PWY-724: superpathway of L-lysine, L-threonine and L-methionine biosynthesis II
PWY-1042: glycolysis IV (plant cytosol)
PWY-5101: L-isoleucine biosynthesis (anaerobic)
PWY-7663: gondoate biosynthesis (anaerobic)
PWY-7220: adenosine deoxyribonucleotides de novo biosynthesis II
PWY-6151: S-adenosyl-L-methionine cycle I
SO4ASSIM-PWY: sulfate reduction I (assimilatory)
PWY-5973: cis-vaccenate biosynthesis
CIVCOLVSIS: glycolysis I (from threonine)
                                                                                                                                PWY-5973: cis-vaccenate biosynthesis
                                                                                                                            PWY-5973: cis-vaccenate biosynthesis
GLYCOLYSIS: glycolysis I (from glucose 6-phosphate)
PWY-5484: glycolysis II (from fructose 6-phosphate)
ANAGLYCOLYSIS-PWY: glycolysis III (from glucose)
PWY-6123: inosine-5'-phosphate biosynthesis I
PWY0-1586: peptidoglycan maturation (meso-diaminopimelate containing)
PWY-5695: urate biosynthesis/inosine 5'-phosphate degradation
PWY-6124: inosine-5'-phosphate biosynthesis II
DTDPRHAMSYN-PWY: dTDP-L-rhamnose biosynthesis I
RHAMCAT-PWY: L-rhamnose degradation I
VALSYN-PWY: L-valine biosynthesis
PWY-7111: pyruvate fermentation to isobutanol (engineered)
                                                                                                                              PWY-7111: pyruvate fermentation to isobutanol (engineered) PWY-7221: guanosine ribonucleotides de novo biosynthesis
                                                                                                                            PWY-7221: guanosine ribonucleotides de novo biosynthesis
PWY-6125: superpathway of guanosine nucleotides de novo biosynthesis II
PWY-7383: anaerobic energy metabolism (invertebrates, cytosol)
1CMET2-PWY: N10-formyl-tetrahydrofolate biosynthesis
PWY-6126: superpathway of adenosine nucleotides de novo biosynthesis II
PWY-7228: superpathway of guanosine nucleotides de novo biosynthesis I
BRANCHED-CHAIN-AA-SYN-PWY: superpathway of branched amino acid biosynthesis
PWY0-845: superpathway of pyridoxal 5'-phosphate biosynthesis and salvage
PANTOSYN-PWY: pantothenate and coenzyme A biosynthesis I
PWY-5097: L-lysine biosynthesis VI
                                                                                                                              PWY-6703: preQ0 biosynthesis
ARGININE-SYN4-PWY: L-ornithine de novo biosynthesis
                                                                                                                              PWY-5659: GDP-mannose biosynthesis
PWY-6385: peptidoglycan biosynthesis III (mycobacteria)
COA-PWY: coenzyme A biosynthesis I
PANTO-PWY: phosphopantothenate biosynthesis I
PWY-7219: adenosne ribonucleotides de novo biosynthesis
                                                                                                                          PANTO-PWY: pnospnopantornenate biosynthesis I
PWY-219: adenosine ribonucleotides de novo biosynthesis
PWY-2942: L-lysine biosynthesis III
PYRIDOXSYN-PWY: pyridoxal 5'-phosphate biosynthesis I
NONOXIPENT-PWY: pentose phosphate pathway (non-oxidative branch)
PWY-6700: queuosine biosynthesis
PWY-1269: CMP-3-deoxy-D-manno-octulosonate biosynthesis I
PWY-3841: folate transformations II
HISTSYN-PWY: L-histidine biosynthesis
GLCMANNANAUT-PWY: superpathway of N-acetylglucosamine, N-acetylmannosamine and N-acetylneuraminate degradation
PHOSLIPSYN-PWY: superpathway of phospholipid biosynthesis I (bacteria)
GALACTUROCAT-PWY: D-galacturonate degradation I
PWY66-400: glycolysis VI (metazoan)
ASPASN-PWY: superpathway of L-aspartate and L-asparagine biosynthesis
GLUCUROCAT-PWY: superpathway of β-D-glucuronide and D-glucuronate degradation
PWY-6168: flavin biosynthesis III (fungi)
PWY-7242: D-fructuronate degradation
GALACT-GLUCUROCAT-PWY: superpathway of hexuronide and hexuronate degradation
PWY-5103: L-isoleucine biosynthesis III
THISYNARA-PWY: superpathway of thiamin diphosphate biosynthesis III (eukaryotes)
PWY-6609: adenine and adenosine salvage III
SER-GLYSYN-PWY: superpathway of L-serine and glycine biosynthesis I
TRPSYN-PWY: L-tryptophan biosynthesis I (from aspartate)
MET_SAM_PWY: Valparpathway of L-amethionine biosynthesis
                                                                                                                             ANAEROFRUCAI – PWY: homolactic fermentation
PYRIDNUCSYN – PWY: NAD biosynthesis I (from aspartate)
MET – SAM – PWY: superpathway of S – adenosyl – L – methionine biosynthesis
PWY – 6270: isoprene biosynthesis I
PWY – 5188: tetrapyrrole biosynthesis I (from glutamate)
COMPLETE – ARO – PWY: superpathway of aromatic amino acid biosynthesis
DENOVOPURINE2 – PWY: superpathway of purine nucleotides de novo biosynthesis II
METSYN – PWY: L – homoserine and L – methionine biosynthesis
PWY – 6737: starch degradation V
PWY – 7187: pyrimidine deoxyribonucleotides de novo biosynthesis II
                                                                                                                                PWY–7187: pyrimidine deoxyribonucleotides de novo biosynthesis II
                                                                                                                                ARO–PWY: chorismate biosynthesis I
                                                                                                                              PWY-6163: chorismate biosynthesis from 3-dehydroquinate TRNA-CHARGING-PWY: tRNA charging
                                                                                                                                PWY-6897: thiamin salvage II
                                                                                                                              PWY66–422: D–galactose degradation V (Leloir pathway)
PWY–6527: stachyose degradation
                                                                                                                             PWY-7400: L-arginine biosynthesis IV (archaebacteria)
ARGSYN-PWY: L-arginine biosynthesis I (via L-ornithine)
RIBOSYN2-PWY: flavin biosynthesis I (bacteria and plants)
                                                                                                                               PWY-6317: galactose degradation I (Leloir pathway)
                                                                                                                              PWY-7357: thiamin formation from pyrithiamine and oxythiamine (yeast)
PWY-7282: 4-amino-2-methyl-5-phosphomethylpyrimidine biosynthesis (yeast)
PWY-7560: methylerythritol phosphate pathway II
                                                                                                                               PWY0-1296: purine ribonucleosides degradation
stool
```

0.5

-0.5