MAG 49
Bin 45
Bin 52
Bin 1
Bin 3
Bin 2
PGW2015-15-bin.28
PGW2015-15-bin.29
PGW2015-15-bin.30
Bin 4
Bin 5
Bin 6
Bin 7
PGW2015-15-bin.1
PGW2015-15-bin.2
PGW2015-15-bin.3
PGW2015-15-bin.4
Bin 8
Bin 9
PGW2015-15-bin.5
PGW2015-15-bin.6
PGW2015-15-bin.7
PGW2015-15-bin.8
PGW2015-15-bin.9
Bin 10
Bin 11
Bin 12
PGW2015-15-bin.10
PGW2015-15-bin.11
PGW2015-15-bin.12
Bin 13
Bin 14
Bin 15
Bin 16
Bin 17
Bin 18
Bin 19
Bin 20
PGW2015-15-bin.13
PGW2015-15-bin.14
PGW2015-15-bin.15
PGW2015-15-bin.16
PGW2015-15-bin.17
PGW2015-15-bin.18
PGW2015-15-bin.19
PGW2015-15-bin.20
glycolysis
gluconeogenesis
TCA Cycle
NADH-quinone oxidoreductase
NADH-quinone oxidoreductase
F-type ATPase
V-/A-type ATPase
Cytochrome c oxidase
Ubiquinol-cytochrome c reductase
Cytochrome o ubiquinol oxidase
Cytochrome aa3-600 menaquinol oxidase
Cytochrome c oxidase, cbb3-type
Cytochrome bd complex
RuBisCo
CBB Cycle
rTCA Cycle
Wood-Ljungdahl
3-Hydroxypropionate Bicycle
4-Hydroxybutyrate/3-hydroxypropionate
pectinesterase
diacetylchitobiose deacetylase
glucoamylase
D-galacturonate epimerase
exo-poly-alpha-galacturonosidase
oligogalacturonide lyase
cellulase
exopolygalacturonase
chitinase
basic endochitinase B
bifunctional chitinase/lysozyme
beta-N-acetylhexosaminidase
D-galacturonate isomerase
alpha-amylase
beta-glucosidase
pullulanase
ammonia oxidation (amo/pmmo)
hydroxylamine oxidation
nitrite oxidation
dissim nitrate reduction
DNRA
nitrite reduction
nitric oxide reduction
nitrous-oxide reduction
nitrogen fixation
hydrazine dehydrogenase
hydrazine synthase
dissimilatory sulfate < > APS
dissimilatory sulfite < > APS
dissimilatory sulfite < > sulfide
thiosulfate oxidation
sox thiosulfate oxidation tsdA
sox thiosulfate oxidation doxAD
sulfur reductase sreABC
thiosulfate/polysulfide reductase
sulfhydrogenase
sulfur disproportionation
sulfur dioxygenase
sulfite dehydrogenase
sulfite dehydrogenase (quinone)
sulfide oxidation
sulfur assimilation
DMSP demethylation
DMS dehydrogenase
DMSO reductase
NiFe hydrogenase
ferredoxin hydrogenase
membrane-bound hydrogenase
hydrogen:quinone oxidoreductase
NAD-reducing hydrogenase
NADP-reducing hydrogenase
NiFe hydrogenase HydL
thiamin biosynthesis
riboflavin biosynthesis
cobalamin biosynthesis
transporter: vitamin B12
transporter: thiamin
transporter: urea
transporter: phosphonate
transporter: phosphate
Flagellum
Chemotaxis
Methanogenesis via methanol
Methanogenesis via acetate
Methanogenesis via dimethylsulfide, methanethiol, methylpropanoate
Methanogenesis via methylamine
Methanogenesis via trimethylamine
Methanogenesis via dimethylamine
Methanogenesis via CO2
Coenzyme B/Coenzyme M regeneration
Coenzyme M reduction to methane
Soluble methane monooxygenase
methanol dehydrogenase
alcohol oxidase
dimethylamine/trimethylamine dehydrogenase
Photosystem II
Photosystem I
Cytochrome b6/f complex
anoxygenic type-II reaction center
anoxygenic type-I reaction center
Retinal biosynthesis
Entner-Doudoroff Pathway
Mixed acid: Lactate
Mixed acid: Formate
Mixed acid: Formate to CO2 & H2
Mixed acid: Acetate
Mixed acid: Ethanol, Acetate to Acetylaldehyde
Mixed acid: Ethanol, Acetyl-CoA to Acetylaldehyde (reversible)
Mixed acid: Ethanol, Acetylaldehyde to Ethanol
Mixed acid: PEP to Succinate via OAA, malate & fumarate
Naphthalene degradation to salicylate
Biofilm PGA Synthesis protein
Colanic acid and Biofilm transcriptional regulator
Biofilm regulator BssS
Colanic acid and Biofilm protein A
Curli fimbriae biosynthesis
Adhesion
Competence-related core components
Competence-related related components
Competence factors
Glyoxylate shunt
Anaplerotic genes
Sulfolipid biosynthesis
C-P lyase cleavage Phn
CP-lyase complex
CP-lyase operon
Type I Secretion
Type II Secretion
Type II Secretion
Type IV Secretion
Type VI Secretion
Sec-SRP
Twin Arginine Targeting
Type Vabc Secretion
Serine pathway/formaldehyde assimilation
Arsenic reduction
0.0
0.2
0.4
0.6
0.8
1.0