

ABC transporters for: alkanesulfonate, arabinooligosaccharide, autoinducer-2, bacitracin, BCAA, cobalt, cystine, D-methionine, hemolysin, methyl galactoside, multiple sugars, osmoprotectant, phosphonate, putrescine, teichoic acid

ABC transporter for: phosphate

ABC transporters for: LPS, lipoprotein, molybdate

ABC transporters for: FAMP, lipoprotein, ribose, sodium

ABC transporters for: biotin, L-antibiotics, oligopeptide, raffinose

2 Fe hydrogenases
4 Fe hydrogenases
6 Fe hydrogenases

1 NiFe hydrogenase
1 NiFe hydrogenase

Paludibacter
Hungatella
Clostridiaceae

Supplementary Figure 2.

Metabolic reconstruction of the *Paludibacter* (blue), *Hungatella* (red), *Clostridiaceae* (grey) MAGs in culture GluFeRB. Pathways shared between these MAGs are represented by purple, green, orange or black, as indicated in the key. Abbreviations: branched chain amino acids (BCAA), N-formyl-4-amino-5-(aminomethyl)-2-methylpyrimidinolipopolysaccharide (FAMP), (LPS), glucose-6-phosphate (G6P), fructose-6-phosphate (F6P), fructose-1,6-bisphosphate (F16P2), glyceraldehyde-3-phosphate (G3P), oxaloacetate (oxal), malate (mal), fumarate (fum).