

Additional File 7. Potential Eukaryote-to-prokaryote LGTs

See legend of Additional File 5 for details, including the taxa color key. For these trees an LGT from a eukaryote to a prokaryote lineage is the most parsimonious explanation for the resulting tree topologies, or else the direction of the LGT is difficult to establish. In some trees arrows point to prokaryotic taxa that are the putative recipients of the LGT. The trees are numbered EBXXX.

Entries in the table of contents below are clickable hyperlinks to the tree figures.

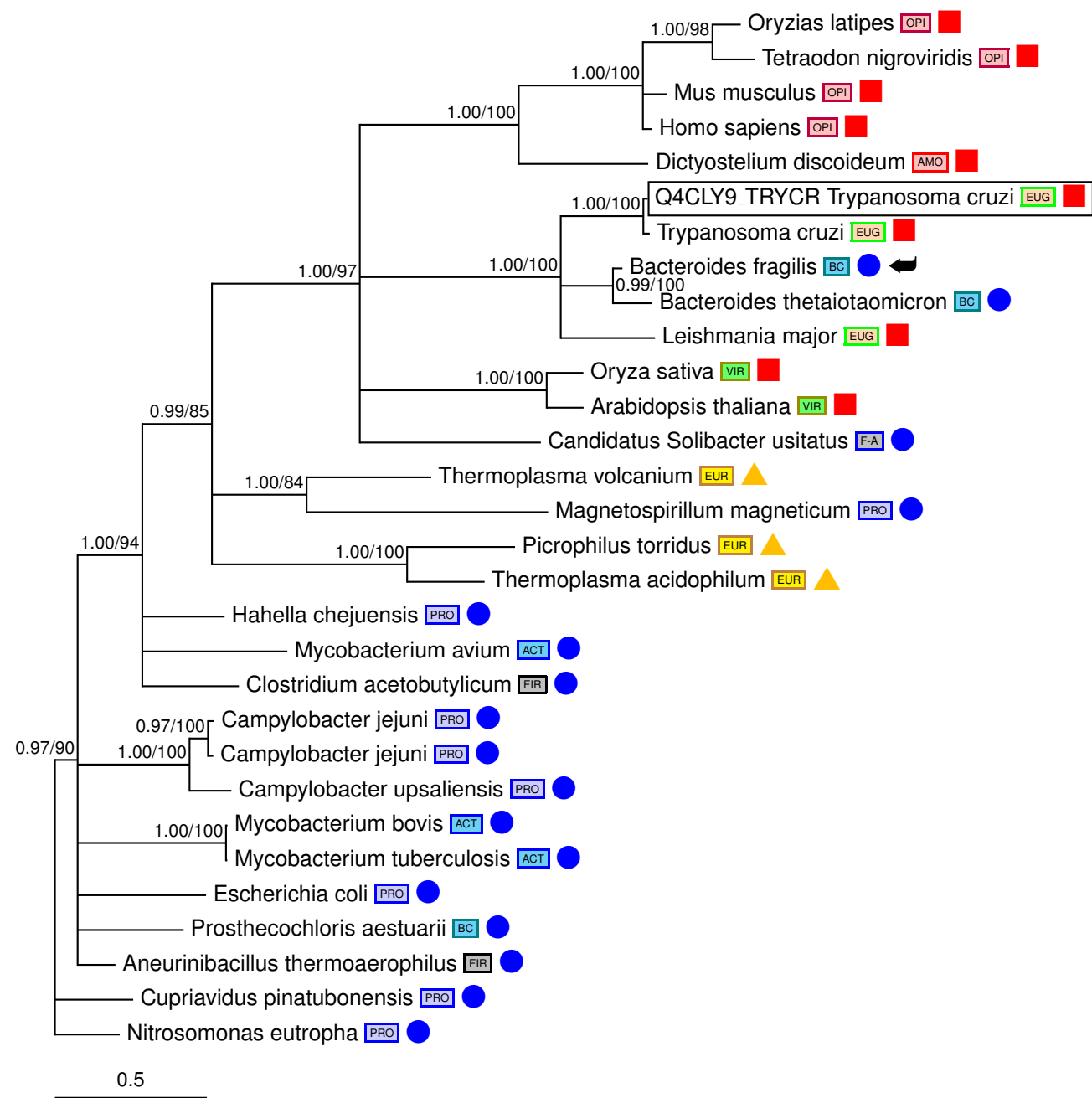
21 September, 2012

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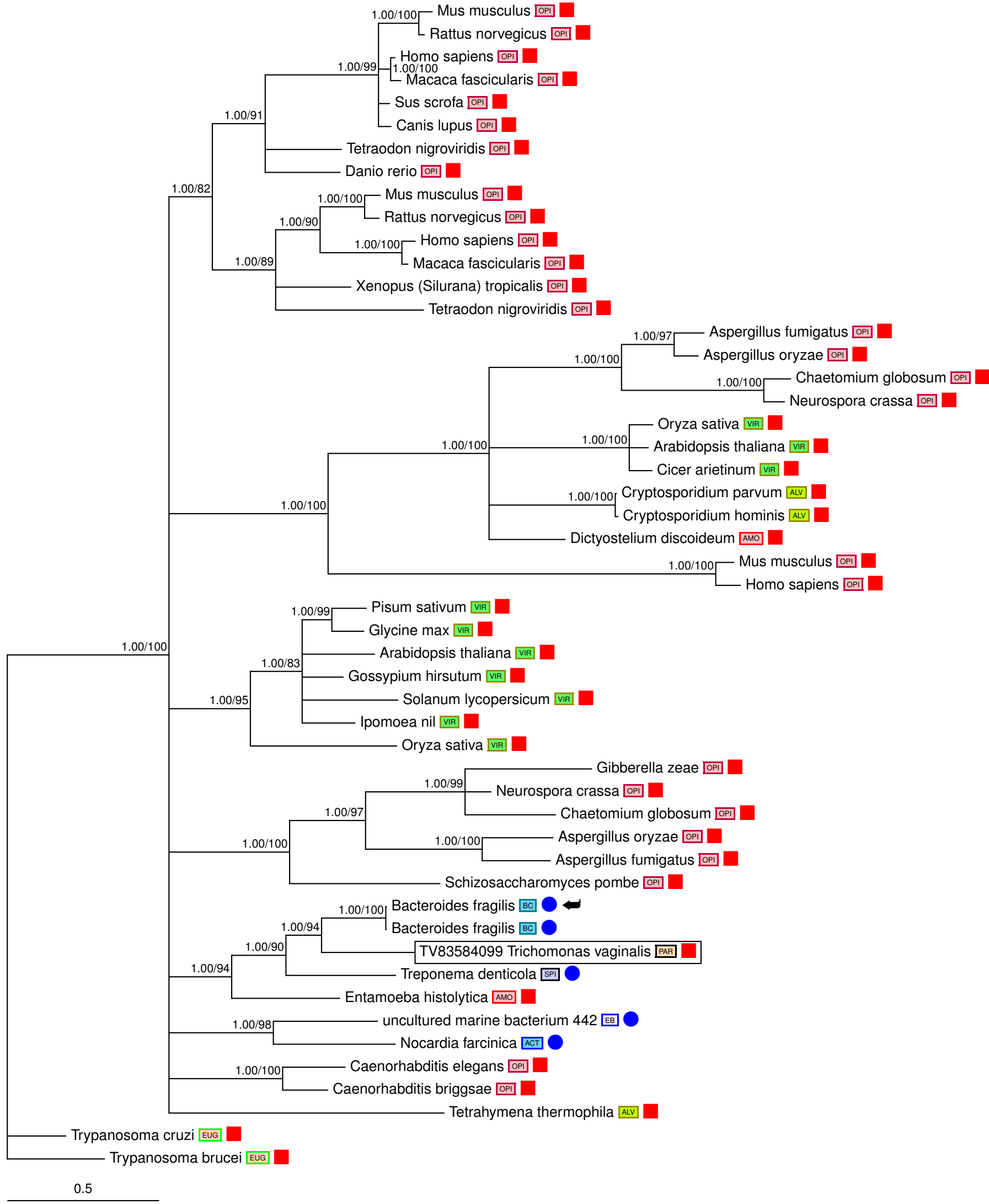
EB001

Candy accession: Q4CLY9_TRYCR
RefSeq accession: XP_802735.1
Uniprot accession: Q4CLY9_TRYCR
Comments: LIKELY LGT INTO BACTEROIDES FROM A KINETOPLASTID
Species affected: LM,TB,TC
Adjacent taxa in tree: Bacteroides
EC annotation - (Blast/Profile): EC:2.7.1.52
PHOBIUS SP: 0
PHOBIUS TMD: 0
RefSeq annotation: fucose kinase
Name of enzyme/protein: Fucose kinase
KEGG PATHWAY - level 1: Carbohydrate Metabolism
KEGG PATHWAY - level 2: Fructose and mannose metabolism, Amino sugar and nucleotide sugar metabolism



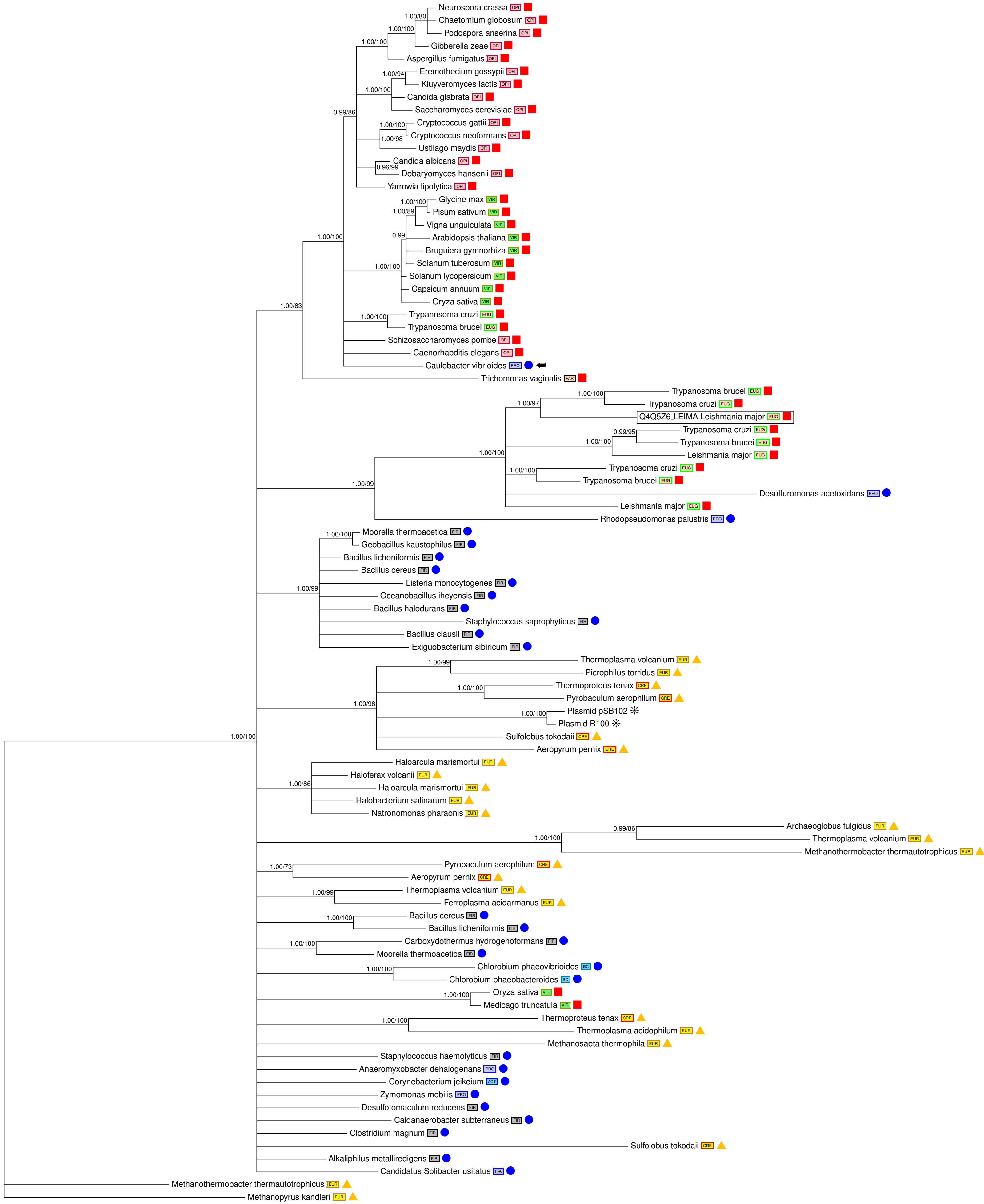
EB002

Candy accession: TV83584099
RefSeq accession: XP_001313668.1
Uniprot accession: A2F2U6_TRIVA
Comments: LIKELY LGT INTO BACTEROIDES FROM A
PARABASALA - MUCOSAL CLAN - TV, EH, TP,
BF
Species affected: TV
Adjacent taxa in tree: Bacteroides
EC annotation - (Blast/Profile): EC:1.3.99.5
PHOBIUS SP: 0
PHOBIUS TMD: 6
RefSeq annotation: 3-oxo-5-alpha-steroid 4-dehydrogenase
family protein
Name of enzyme/protein: 3-oxo-5alpha-steroid 4-dehydrogenase
KEGG PATHWAY - level 1: Lipid Metabolism
KEGG PATHWAY - level 2: Steroid hormone biosynthesis



EB003

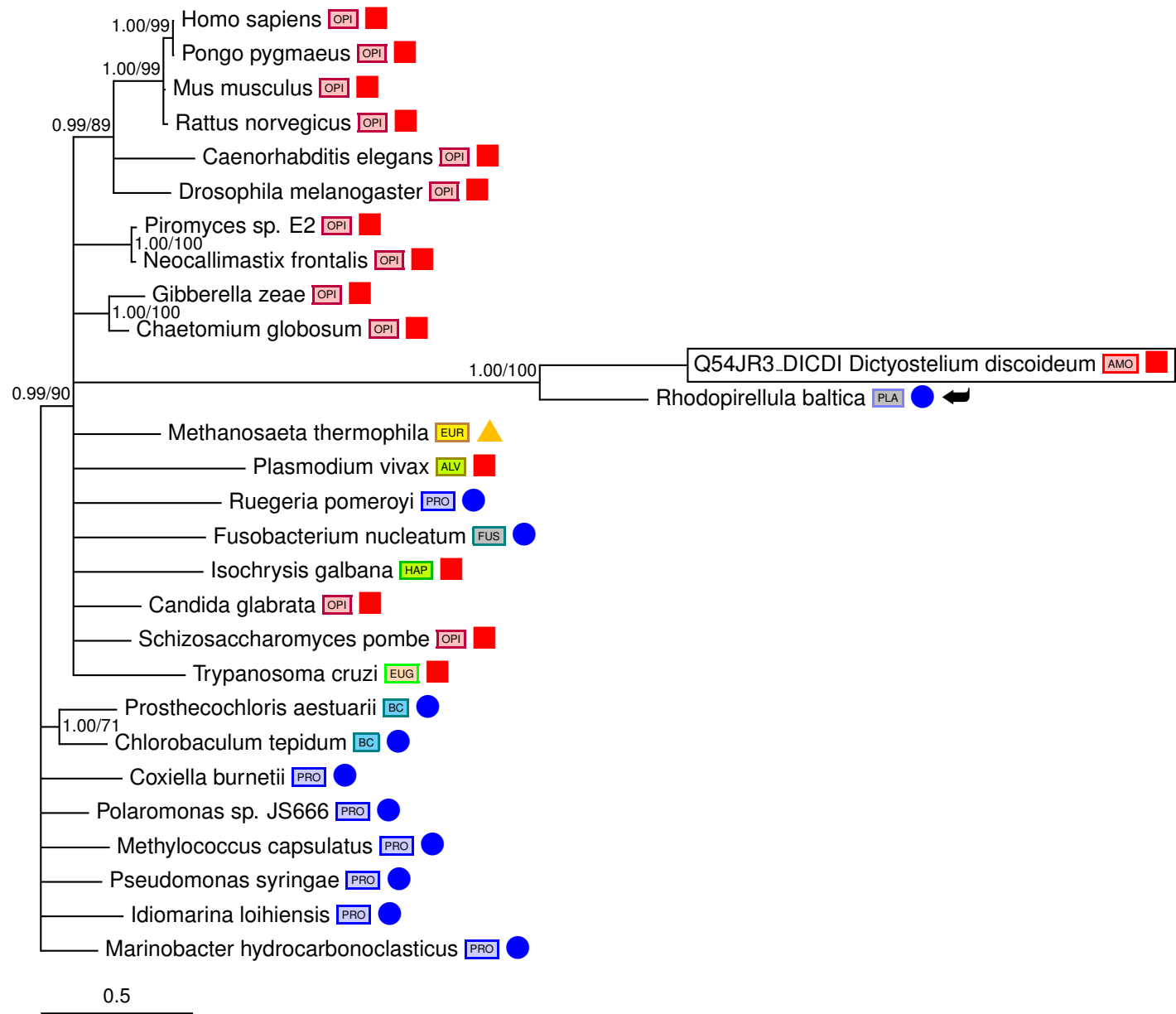
Candy accession: Q4Q5Z6_LEIMA
RefSeq accession: XP_001685252.1
Uniprot accession: Q4Q5Z6_LEIMA
Comments: LIKELY LGT INTO *Caulobacter vibrioides*
Species adjacent: LM,TB,TC
Adjacent taxa in tree: Proteobacteria
EC annotation - (Blast/Profile): EC:1.8.1.4
PHOBIOUS SP: 0
PHOBIOUS TMD: 0
RefSeq annotation: acetoin dehydrogenase e3 component-like protein
Name of enzyme/protein: dihydrolipoyl dehydrogenase - phosphatidylinositol phosphatase
KEGG PATHWAY - level 1: Carbohydrate Metabolism, Amino Acid metabolism
KEGG PATHWAY - level 2: Glycolysis / Gluconeogenesis, Citrate cycle (TCA cycle), Glycine, serine and threonine metabolism



0.5

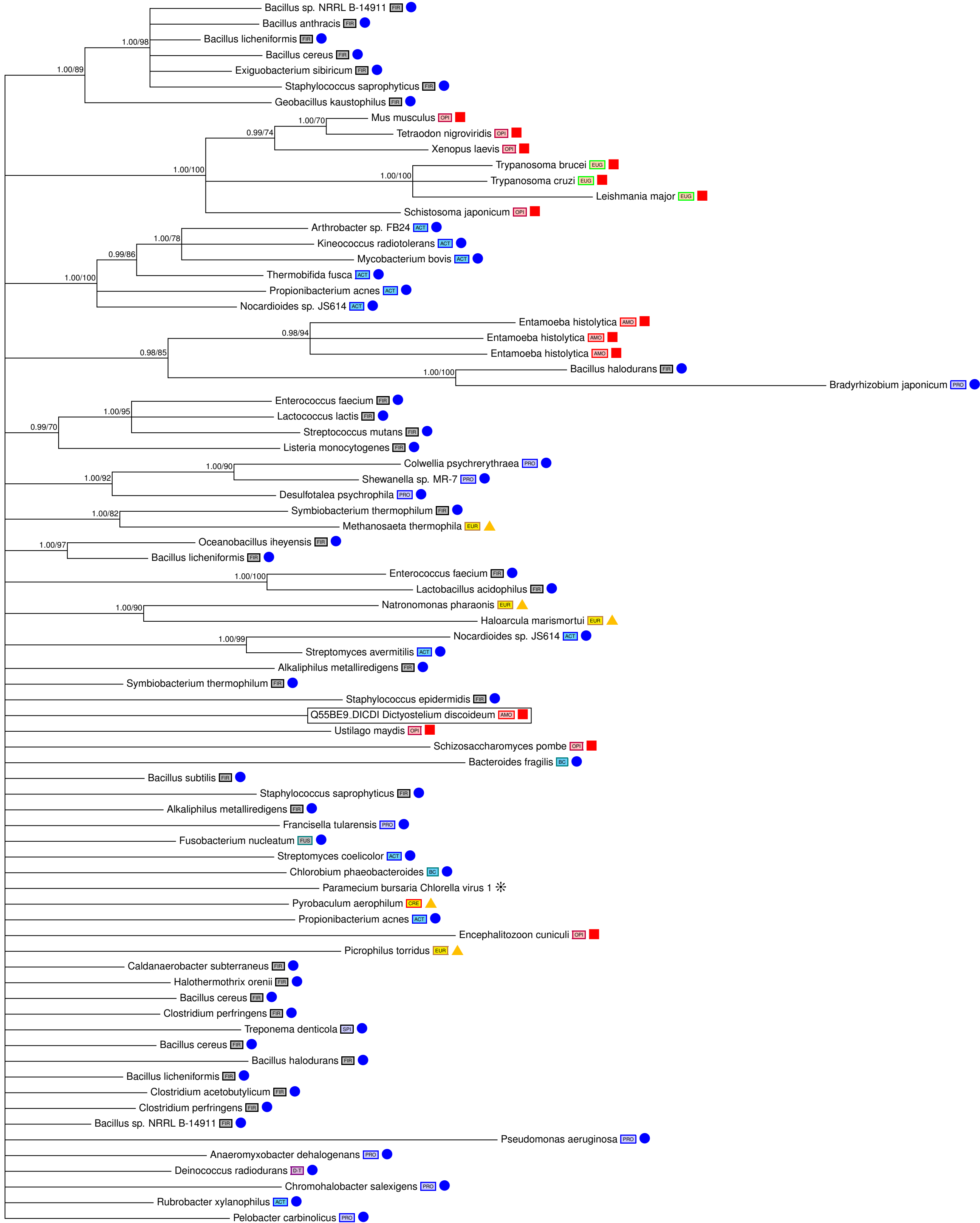
EB004

Candy accession: Q54JR3_DICDI
RefSeq accession: XP_637089.1
Uniprot accession: Q54JR3_DICDI
Comments: POSSIBLE LGT INTO RHODOPIRELLULA FROM AN AMOEBOZOA
Species affected: DD
Adjacent taxa in tree: Planctomycetes
EC annotation - (Blast/Profile): EC:2.7.4.3
PHOBIUS SP: 0
PHOBIUS TMD: 0
RefSeq annotation: adenylate kinase
Name of enzyme/protein: Adenylate kinase
KEGG PATHWAY - level 1: Nucleotide Metabolism
KEGG PATHWAY - level 2: Purine metabolism



EB005

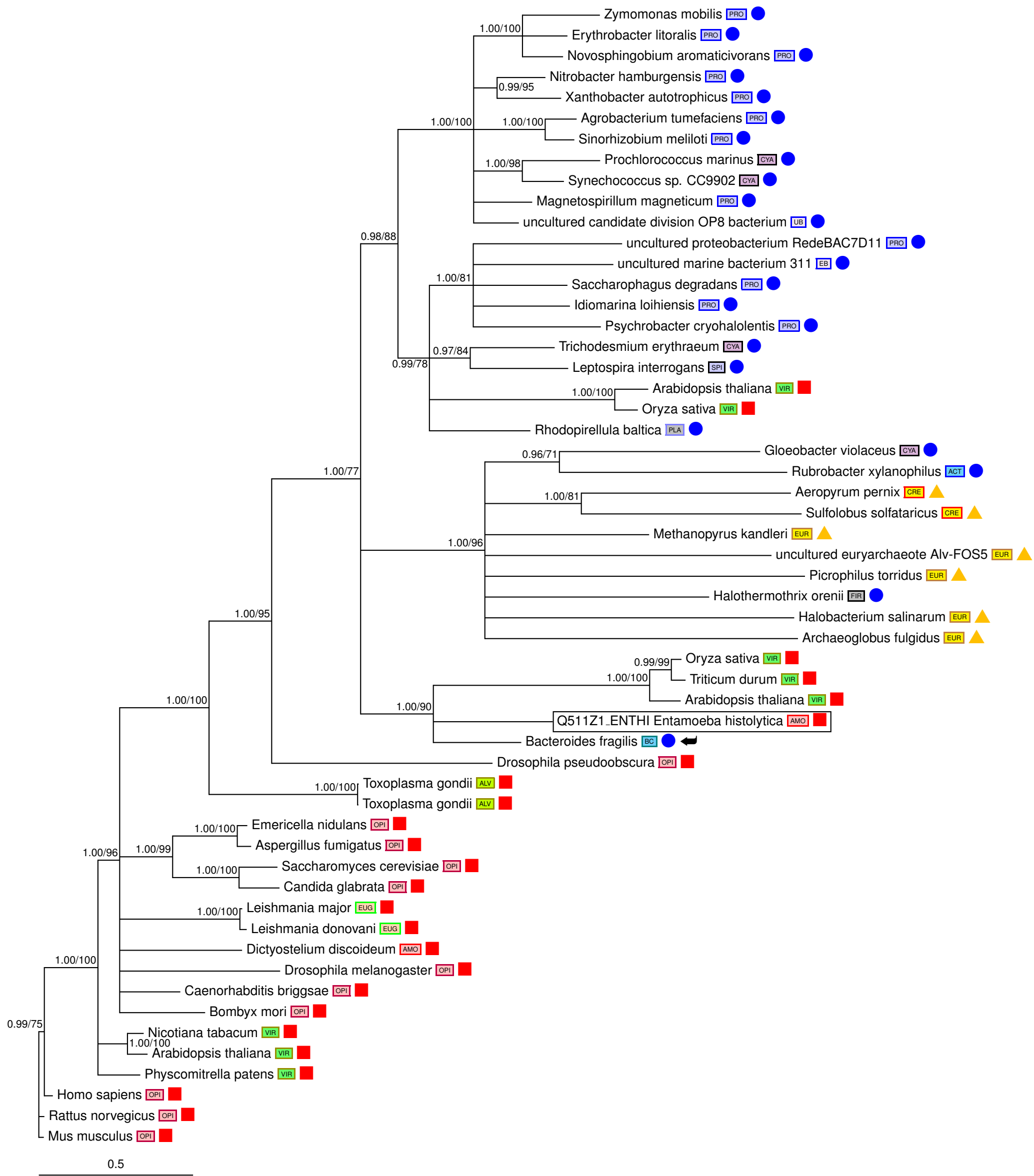
Candy accession: Q55BE9_DICDI
RefSeq accession: XP_645663.1
Uniprot accession: Q55BE9_DICDI
Comments: POSSIBLE LGT INTO BACTERIA FROM AN AMOEBOZOA
Species affected: EH
Adjacent taxa in tree: BacteriaL
EC annotation - (Blast/Profile): EC:3.1.4.46
PHOBIUS SP: 0
PHOBIUS TMD: 2
RefSeq annotation: hypothetical protein DDB_G0271374
Name of enzyme/protein: glycerophosphodiester phosphodiesterase
KEGG PATHWAY - level 1: Lipid Metabolism
KEGG PATHWAY - level 2: Glycerophospholipid metabolism



0.2

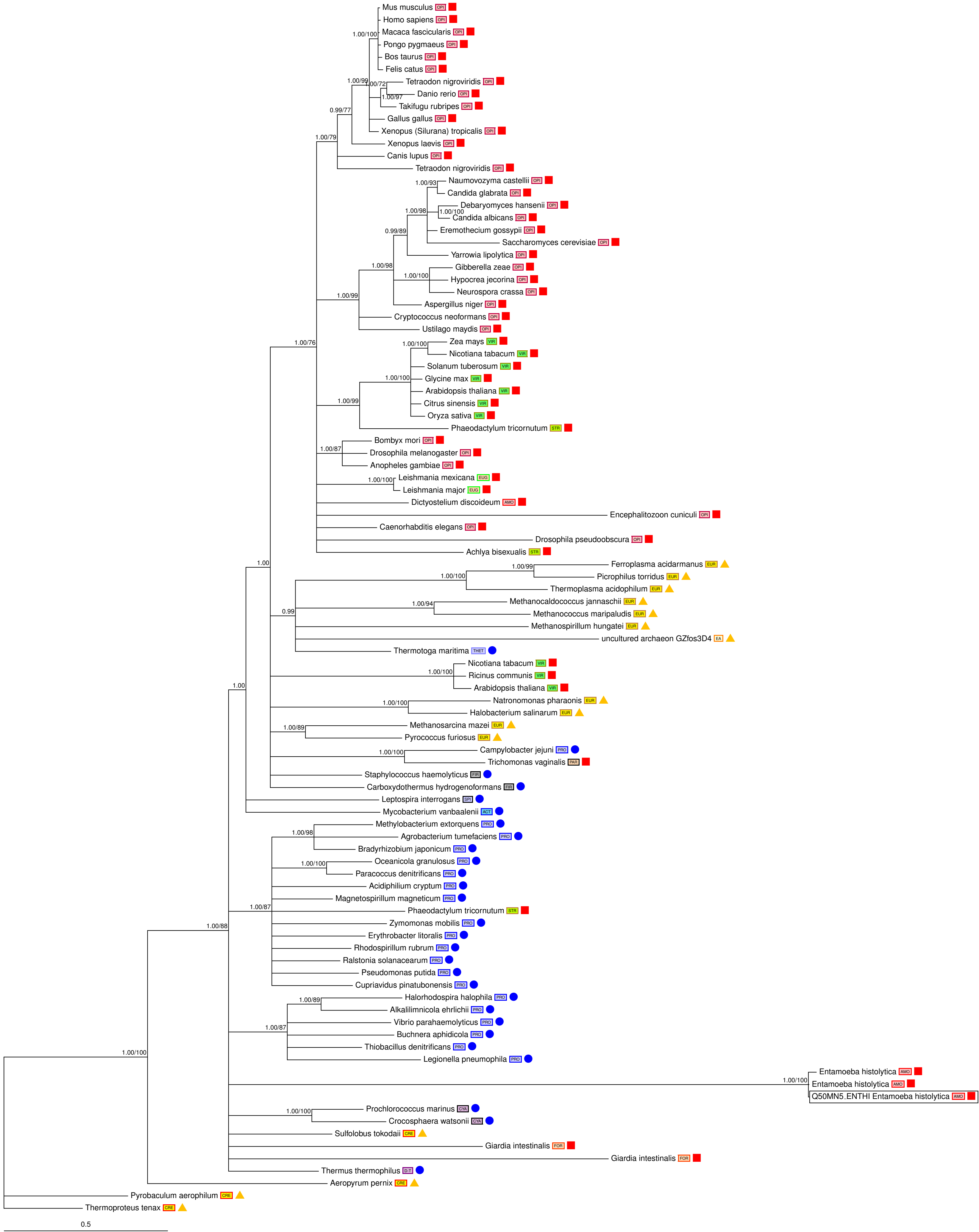
EB006

Candy accession: Q511Z1_ENTHI
RefSeq accession: XP_653045.1
Uniprot accession: C4MAP6_ENTHI
Comments: LIKELY LGT INTO BACTEROIDES FROM A EUKARYOTE
Species affected: EH
Adjacent taxa in tree: Bacteroides
EC annotation - (Blast/Profile): na
PHOBIUS SP: 0
PHOBIUS TMD: 0
RefSeq annotation: kinase, PfkB family
Name of enzyme/protein: kinase, PfkB family
KEGG PATHWAY - level 1: Hypothetical proteins
KEGG PATHWAY - level 2: Hypothetical proteins



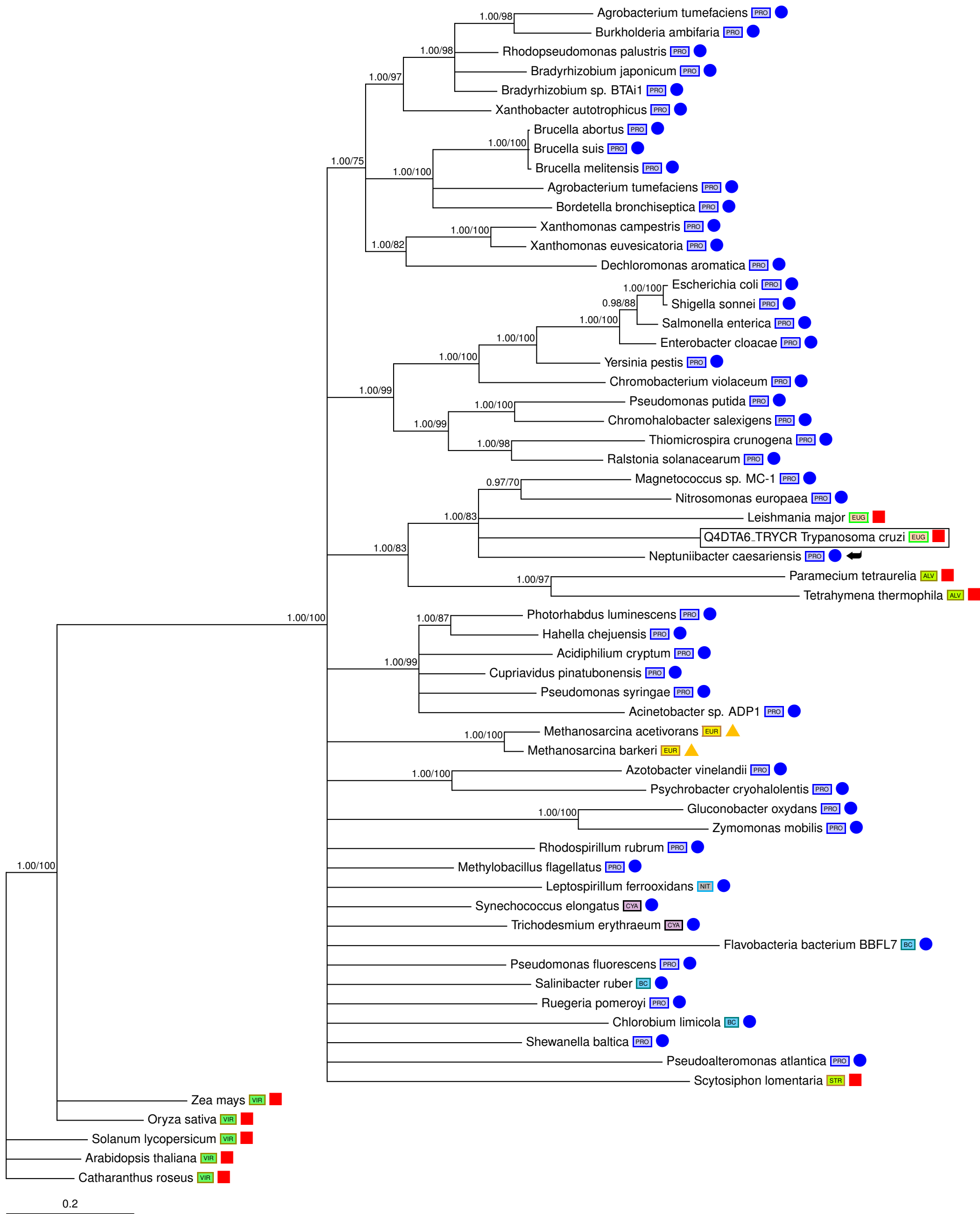
EB007

Candy accession: Q50MN5_ENTHI
RefSeq accession: XP_649089.1
Uniprot accession: C4LXC4_ENTHI
Comments: POSSIBLE LGT INTO CAMPYLOBACTER FROM A PARABASALA
Species affected: TV
Adjacent taxa in tree: Campylobacter
EC annotation - (Blast/Profile): EC:2.7.1.40
PHOBIOUS SP: 0
PHOBIOUS TMD: 0
RefSeq annotation: hypothetical protein
Name of enzyme/protein: Pyruvate kinase
KEGG PATHWAY - level 1: Carbohydrate Metabolism, Nucleotide Metabolism
KEGG PATHWAY - level 2: Glycolysis / Gluconeogenesis, Purine metabolism, Pyruvate metabolism



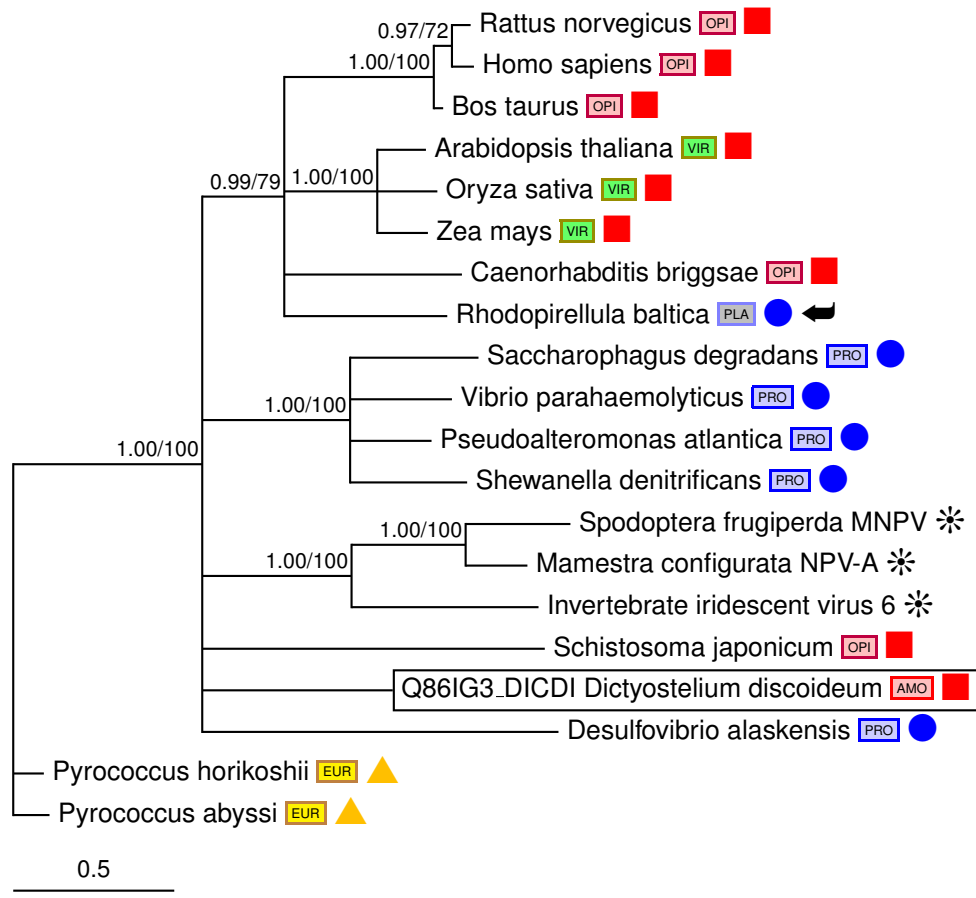
EB008

Candy accession: Q4DTA6_TRYCR
RefSeq accession: XP_817608.1
Uniprot accession: Q4DTA6_TRYCR
Comments: POSSIBLE LGT INTO BACTERIA FROM A KINETOPLASTID
Species affected: LM,TC
Adjacent taxa in tree: Protobacteria
EC annotation - (Blast/Profile): EC:1.6.99.1
PHOBIUS SP: 0
PHOBIUS TMD: 0
RefSeq annotation: prostaglandin F2alpha synthase
Name of enzyme/protein: NADPH dehydrogenase
KEGG PATHWAY - level 1: Carbohydrate Metabolism
KEGG PATHWAY - level 2: Fructose and mannose metabolism, Amino sugar and nucleotide sugar metabolism



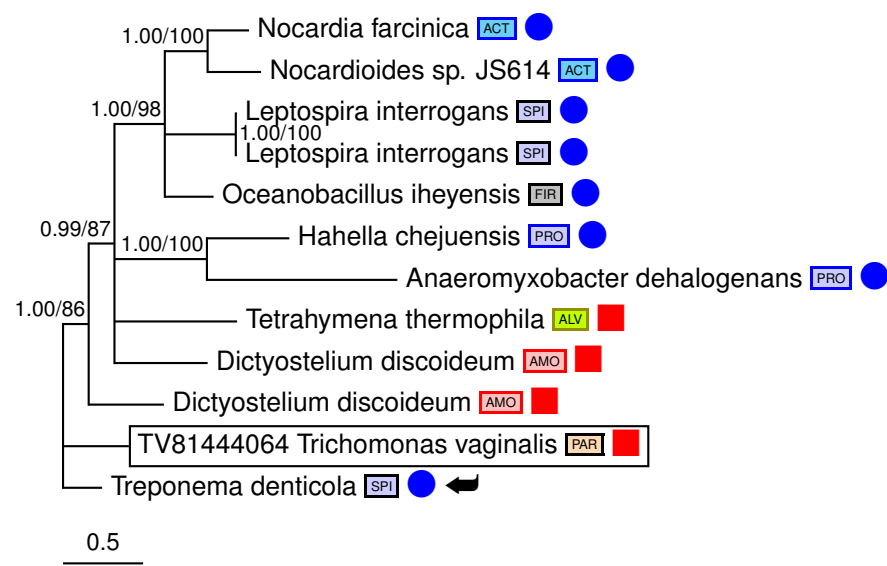
EB009

Candy accession: Q86IG3_DICDI
RefSeq accession: XP_644904.1
Uniprot accession: Q86IG3_DICDI
Comments: POSSIBLE LGT INTO BACTERIA FROM A EUKARYOTE
Species affected: NA
Adjacent taxa in tree: Planctomycetes
EC annotation - (Blast/Profile): EC:3.1.3.-
PHOBIUS SP: 0
PHOBIUS TMD: 1
RefSeq annotation: phosphatidylinositol phosphatase
Name of enzyme/protein: phosphatidylinositol phosphatase
KEGG PATHWAY - level 1: Reaction
KEGG PATHWAY - level 2: Reaction



EB010

Candy accession: TV81444064
RefSeq accession: XP_001308053.1
Uniprot accession: A2FJ08_TRIVA
Comments: POSSIBLE LGT INTO TREPONEMA FROM A PARABASALA
Species affected: TV
Adjacent taxa in tree: Treponema
EC annotation - (Blast/Profile): na
PHOBIUS SP: Y
PHOBIUS TMD: 0
RefSeq annotation: hypothetical protein
Name of enzyme/protein: Hypothetical proteins
KEGG PATHWAY - level 1: Hypothetical proteins
KEGG PATHWAY - level 2: Hypothetical proteins



EB011

Candy accession: TV93234199
RefSeq accession: XP_001326381.1
Uniprot accession: A2DZF4_TRIVA
Comments: POSSIBLE LGT INTO BACILLUS FROM A PARABASALA
Species affected: TV
Adjacent taxa in tree: Bacillus
EC annotation - (Blast/Profile): EC:4.6.1.13
PHOBIOUS SP: 0
PHOBIOUS TMD: 0
RefSeq annotation: Phosphatidylinositol-specific phospholipase C, X domain containing protein
Name of enzyme/protein: phosphatidylinositol diacylglycerol-lyase
KEGG PATHWAY - level 1: Carbohydrate Metabolism
KEGG PATHWAY - level 2: Inositol phosphate metabolism

