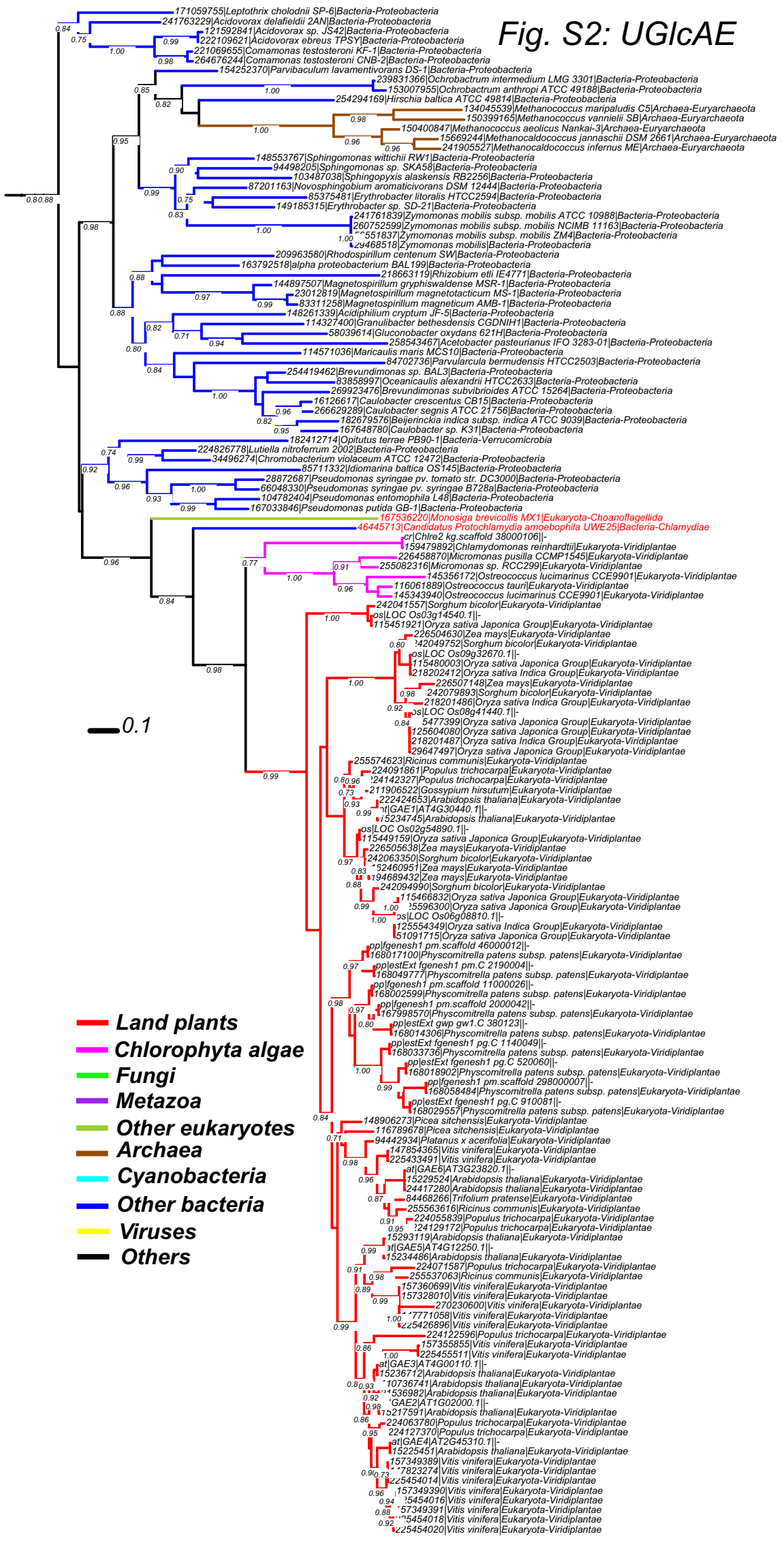
Fig. S2: UGlcAE
171059755|Leptothrix cholodnii SP-6|Bacteria-Proteobacteria
241763229|Acidovorax delafieldii 2AN|Bacteria-Proteobacteria
121592841|Acidovorax sp. JS42|Bacteria-Proteobacteria
222109621|Acidovorax ebreus TPSY|Bacteria-Proteobacteria
221069655|Comamonas testosteroni KF-1|Bacteria-Proteobacteria
264676244|Comamonas testosteroni CNB-2|Bacteria-Proteobacteria
154252370|Parvibaculum lavamentivorans DS-1|Bacteria-Proteobacteria
239831366|Ochrobactrum intermedium LMG 3301|Bacteria-Proteobacteria
153007955|Ochrobactrum anthropi ATCC 49188|Bacteria-Proteobacteria
254294169|Hirschia baltica ATCC 49814|Bacteria-Proteobacteria
134045539|Methanococcus maripaludis C5|Archaea-Euryarchaeota
150399165|Methanococcus vannielii SB|Archaea-Euryarchaeota
150400847|Methanococcus aeolicus Nankai-3|Archaea-Euryarchaeota
15669244|Methanocaldococcus jannaschii DSM 2661|Archaea-Euryarchaeota
241905527|Methanocaldococcus infernus ME|Archaea-Euryarchaeota
148553767|Sphingomonas wittichii RW1|Bacteria-Proteobacteria
94498205|Sphingomonas sp. SKA58|Bacteria-Proteobacteria
103487038|Sphingopyxis alaskensis RB2256|Bacteria-Proteobacteria
87201163|Novosphingobium aromaticivorans DSM 12444|Bacteria-Proteobacteria
85375481|Erythrobacter litoralis HTCC2594|Bacteria-Proteobacteria
149185315|Erythrobacter sp. SD-21|Bacteria-Proteobacteria
241761839|Zymomonas mobilis subsp. mobilis ATCC 10988|Bacteria-Proteobacteria
260752599|Zymomonas mobilis subsp. mobilis NCIMB 11163|Bacteria-Proteobacteria
551837|Zymomonas mobilis subsp. mobilis ZM4|Bacteria-Proteobacteria
29468518|Zymomonas mobilis|Bacteria-Proteobacteria
209963580|Rhodospirillum centenum SW|Bacteria-Proteobacteria
163792518|alpha proteobacterium BAL199|Bacteria-Proteobacteria
218663119|Rhizobium etli IE4771|Bacteria-Proteobacteria
144897507|Magnetospirillum gryphiswaldense MSR-1|Bacteria-Proteobacteria
23012819|Magnetospirillum magnetotacticum MS-1|Bacteria-Proteobacteria
83311258|Magnetospirillum magneticum AMB-1|Bacteria-Proteobacteria
148261339|Acidiphilium cryptum JF-5|Bacteria-Proteobacteria
114327400|Granulibacter bethesdensis CGDNIH1|Bacteria-Proteobacteria
58039614|Gluconobacter oxydans 621H|Bacteria-Proteobacteria
258543467|Acetobacter pasteurianus IFO 3283-01|Bacteria-Proteobacteria
114571036|Maricaulis maris MCS10|Bacteria-Proteobacteria
84702736|Parvularcula bermudensis HTCC2503|Bacteria-Proteobacteria
254419462|Brevundimonas sp. BAL3|Bacteria-Proteobacteria
83858997|Oceanicaulis alexandrii HTCC2633|Bacteria-Proteobacteria
269923476|Brevundimonas subvibrioides ATCC 15264|Bacteria-Proteobacteria
16126617|Caulobacter crescentus CB15|Bacteria-Proteobacteria
266629289|Caulobacter segnis ATCC 21756|Bacteria-Proteobacteria
182679576|Beijerinckia indica subsp. indica ATCC 9039|Bacteria-Proteobacteria
167648780|Caulobacter sp. K31|Bacteria-Proteobacteria
182412714|Opitutus terrae PB90-1|Bacteria-Verrucomicrobia
224826778|Lutiella nitroferrum 2002|Bacteria-Proteobacteria
34496274|Chromobacterium violaceum ATCC 12472|Bacteria-Proteobacteria
85711332|Idiomarina baltica OS145|Bacteria-Proteobacteria
28872687|Pseudomonas syringae pv. tomato str. DC3000|Bacteria-Proteobacteria
66048330|Pseudomonas syringae pv. syringae B728a|Bacteria-Proteobacteria
104782404|Pseudomonas entomophila L48|Bacteria-Proteobacteria
167033846|Pseudomonas putida GB-1|Bacteria-Proteobacteria
167536220|Monosiga brevicollis MX1|Eukaryota-Choanoflagellida
46445713|Candidatus Protochlamydia amoebophila UWE25|Bacteria-Chlamydiae
cr|Chlre2 kg.scaffold 38000106||-
159479892|Chlamydomonas reinhardtii|Eukaryota-Viridiplantae
226458870|Micromonas pusilla CCMP1545|Eukaryota-Viridiplantae
255082316|Micromonas sp. RCC299|Eukaryota-Viridiplantae
145356172|Ostreococcus lucimarinus CCE9901|Eukaryota-Viridiplantae
116061889|Ostreococcus tauri|Eukaryota-Viridiplantae
145343940|Ostreococcus lucimarinus CCE9901|Eukaryota-Viridiplantae
242041557|Sorghum bicolor|Eukaryota-Viridiplantae
os|LOC Os03g14540.1||-
115451921|Oryza sativa Japonica Group|Eukaryota-Viridiplantae
226504630|Zea mays|Eukaryota-Viridiplantae
242049752|Sorghum bicolor|Eukaryota-Viridiplantae
os|LOC Os09g32670.1||-
115480003|Oryza sativa Japonica Group|Eukaryota-Viridiplantae
218202412|Oryza sativa Indica Group|Eukaryota-Viridiplantae
226507148|Zea mays|Eukaryota-Viridiplantae
242079893|Sorghum bicolor|Eukaryota-Viridiplantae
218201486|Oryza sativa Indica Group|Eukaryota-Viridiplantae
os|LOC Os08g41440.1||-
5477399|Oryza sativa Japonica Group|Eukaryota-Viridiplantae
125604080|Oryza sativa Japonica Group|Eukaryota-Viridiplantae
218201487|Oryza sativa Indica Group|Eukaryota-Viridiplantae
29647497|Oryza sativa Japonica Group|Eukaryota-Viridiplantae
255574623|Ricinus communis|Eukaryota-Viridiplantae
224091861|Populus trichocarpa|Eukaryota-Viridiplantae
241142327|Populus trichocarpa|Eukaryota-Viridiplantae
211906522|Gossypium hirsutum|Eukaryota-Viridiplantae
222424653|Arabidopsis thaliana|Eukaryota-Viridiplantae
at|GAE1|AT4G30440.1||-
15234745|Arabidopsis thaliana|Eukaryota-Viridiplantae
os|LOC Os02g54890.1||-
115449159|Oryza sativa Japonica Group|Eukaryota-Viridiplantae
226505638|Zea mays|Eukaryota-Viridiplantae
242063350|Sorghum bicolor|Eukaryota-Viridiplantae
52460951|Zea mays|Eukaryota-Viridiplantae
194689432|Zea mays|Eukaryota-Viridiplantae
242094990|Sorghum bicolor|Eukaryota-Viridiplantae
115466832|Oryza sativa Japonica Group|Eukaryota-Viridiplantae
5596300|Oryza sativa Japonica Group|Eukaryota-Viridiplantae
os|LOC Os06g08810.1||-
125554349|Oryza sativa Indica Group|Eukaryota-Viridiplantae
51091715|Oryza sativa Japonica Group|Eukaryota-Viridiplantae
pp|fgenesh1 pm.scaffold 46000012||-
168017100|Physcomitrella patens subsp. patens|Eukaryota-Viridiplantae
pp|estExt fgenesh1 pm.C 2190004||-
168049777|Physcomitrella patens subsp. patens|Eukaryota-Viridiplantae
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168002599|Physcomitrella patens subsp. patens|Eukaryota-Viridiplantae
pp|fgenesh1 pm.scaffold 2000042||-
167998570|Physcomitrella patens subsp. patens|Eukaryota-Viridiplantae
pp|estExt gwp gw1.C 380123||-
168014306|Physcomitrella patens subsp. patens|Eukaryota-Viridiplantae
pp|estExt fgenesh1 pg.C 1140049||-
168033736|Physcomitrella patens subsp. patens|Eukaryota-Viridiplantae
pp|estExt fgenesh1 pg.C 520060||-
168018902|Physcomitrella patens subsp. patens|Eukaryota-Viridiplantae
pp|fgenesh1 pm.scaffold 298000007||-
168058484|Physcomitrella patens subsp. patens|Eukaryota-Viridiplantae
pp|estExt fgenesh1 pg.C 910081||-
168029557|Physcomitrella patens subsp. patens|Eukaryota-Viridiplantae
148906273|Picea sitchensis|Eukaryota-Viridiplantae
116789678|Picea sitchensis|Eukaryota-Viridiplantae
94442934|Platanus x acerifolia|Eukaryota-Viridiplantae
147854365|Vitis vinifera|Eukaryota-Viridiplantae
225433491|Vitis vinifera|Eukaryota-Viridiplantae
at|GAE6|AT3G23820.1||-
15229524|Arabidopsis thaliana|Eukaryota-Viridiplantae
24417280|Arabidopsis thaliana|Eukaryota-Viridiplantae
84468266|Trifolium pratense|Eukaryota-Viridiplantae
255563616|Ricinus communis|Eukaryota-Viridiplantae
224055839|Populus trichocarpa|Eukaryota-Viridiplantae
224129172|Populus trichocarpa|Eukaryota-Viridiplantae
15293119|Arabidopsis thaliana|Eukaryota-Viridiplantae
at|GAE5|AT4G12250.1||-
15234486|Arabidopsis thaliana|Eukaryota-Viridiplantae
224071587|Populus trichocarpa|Eukaryota-Viridiplantae
255537063|Ricinus communis|Eukaryota-Viridiplantae
157360699|Vitis vinifera|Eukaryota-Viridiplantae
157328010|Vitis vinifera|Eukaryota-Viridiplantae
270230600|Vitis vinifera|Eukaryota-Viridiplantae
17771058|Vitis vinifera|Eukaryota-Viridiplantae
225426896|Vitis vinifera|Eukaryota-Viridiplantae
224122596|Populus trichocarpa|Eukaryota-Viridiplantae
157355855|Vitis vinifera|Eukaryota-Viridiplantae
225455511|Vitis vinifera|Eukaryota-Viridiplantae
at|GAE3|AT4G00110.1||-
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10736741|Arabidopsis thaliana|Eukaryota-Viridiplantae
1536982|Arabidopsis thaliana|Eukaryota-Viridiplantae
GAE2|AT1G02000.1||-
15217591|Arabidopsis thaliana|Eukaryota-Viridiplantae
224063780|Populus trichocarpa|Eukaryota-Viridiplantae
224127370|Populus trichocarpa|Eukaryota-Viridiplantae
at|GAE4|AT2G45310.1||-
15225451|Arabidopsis thaliana|Eukaryota-Viridiplantae
157349389|Vitis vinifera|Eukaryota-Viridiplantae
17823274|Vitis vinifera|Eukaryota-Viridiplantae
225454014|Vitis vinifera|Eukaryota-Viridiplantae
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5454018|Vitis vinifera|Eukaryota-Viridiplantae
225454020|Vitis vinifera|Eukaryota-Viridiplantae
0.1
Land plants
Chlorophyta algae
Fungi
Metazoa
Other eukaryotes
Archaea
Cyanobacteria
Other bacteria
Viruses
Others