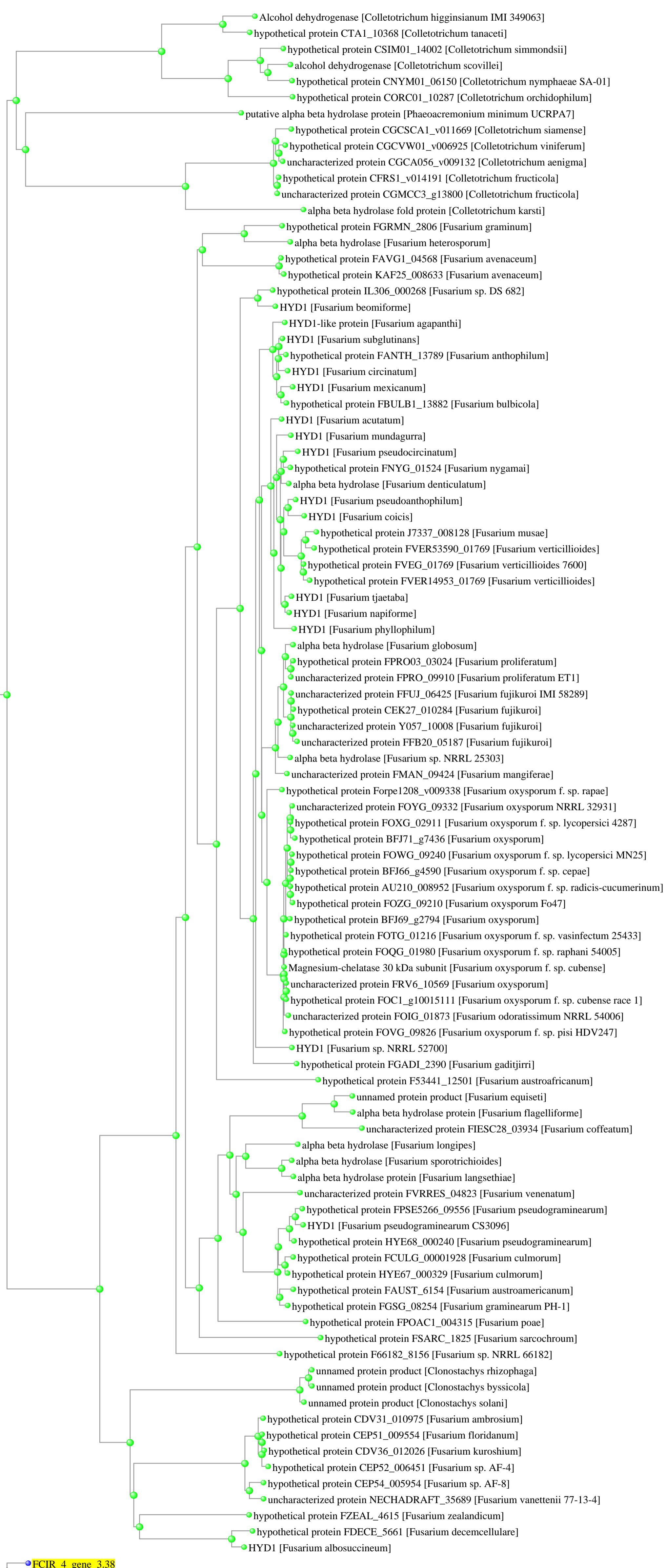


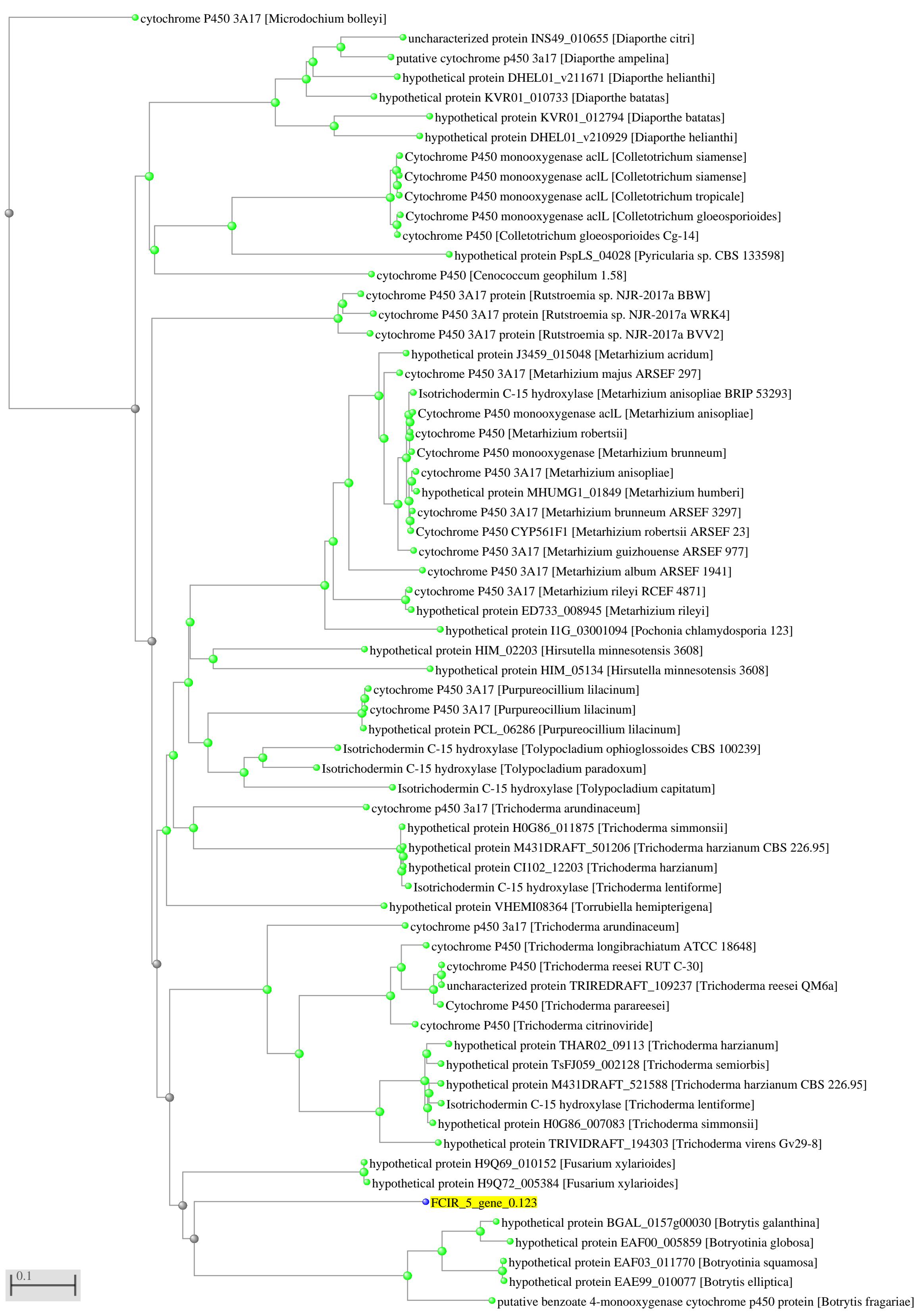
Figure S7. Host-range-associated genes with ancestral origins outside *Fusarium* but in the Ascomycetes. Host-range-associated genes investigated are highlighted in yellow; FCIR = *Fusarium circinatum* and FTEMP = *Fusarium temperatum*.

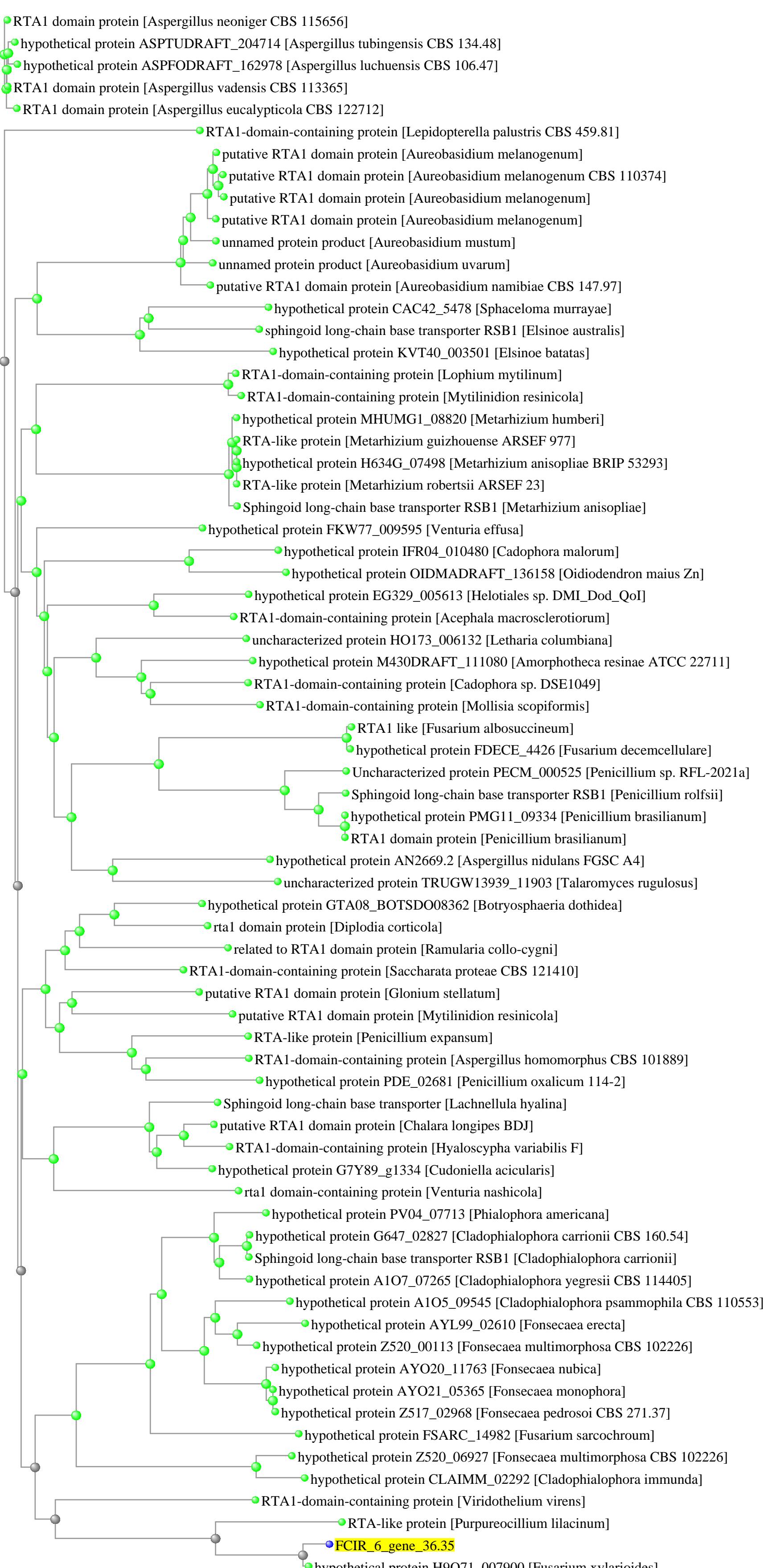


0.1

FCIR_4_gene_3.38

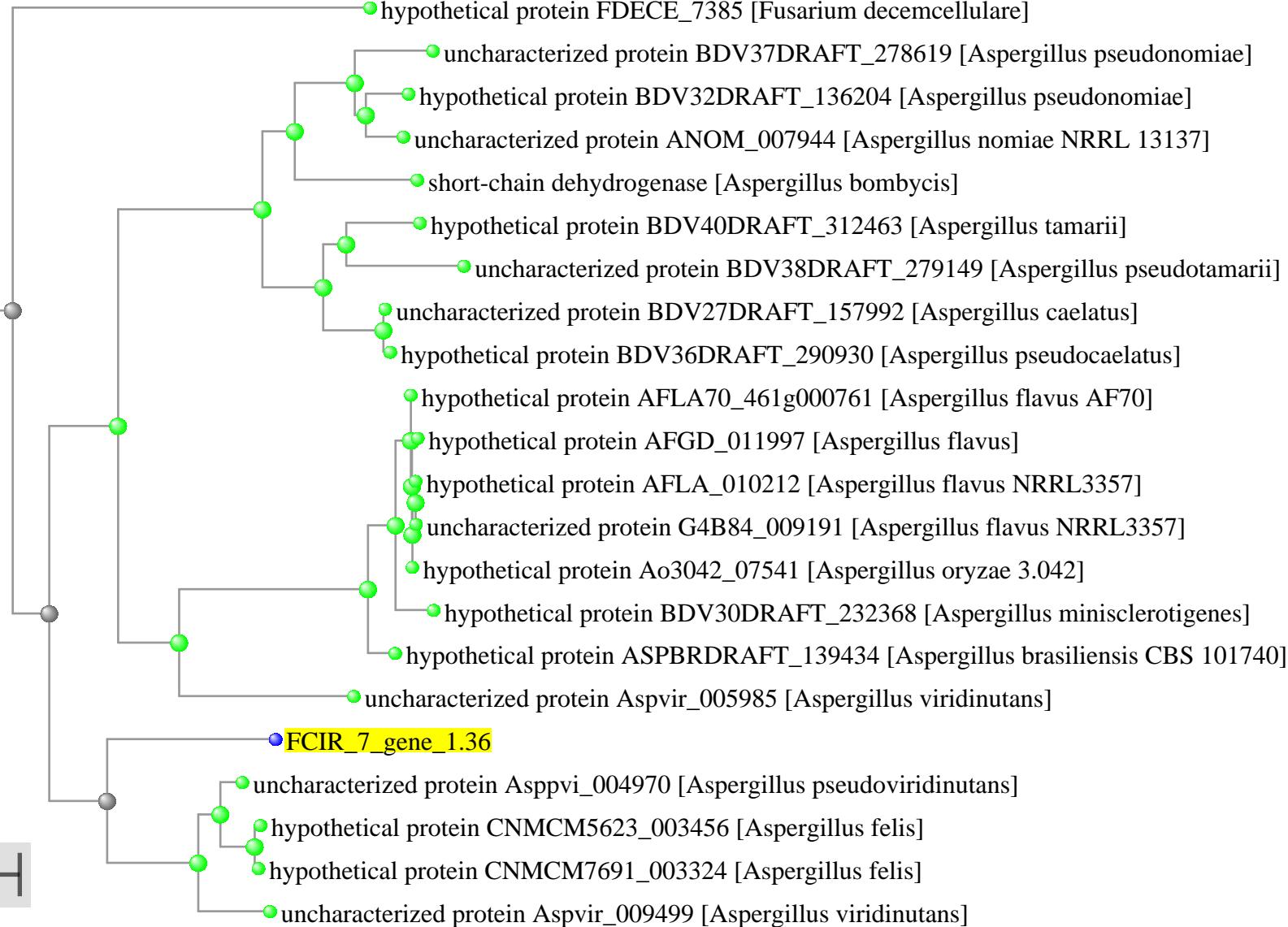
HYD1 [Fusarium mexicanum]



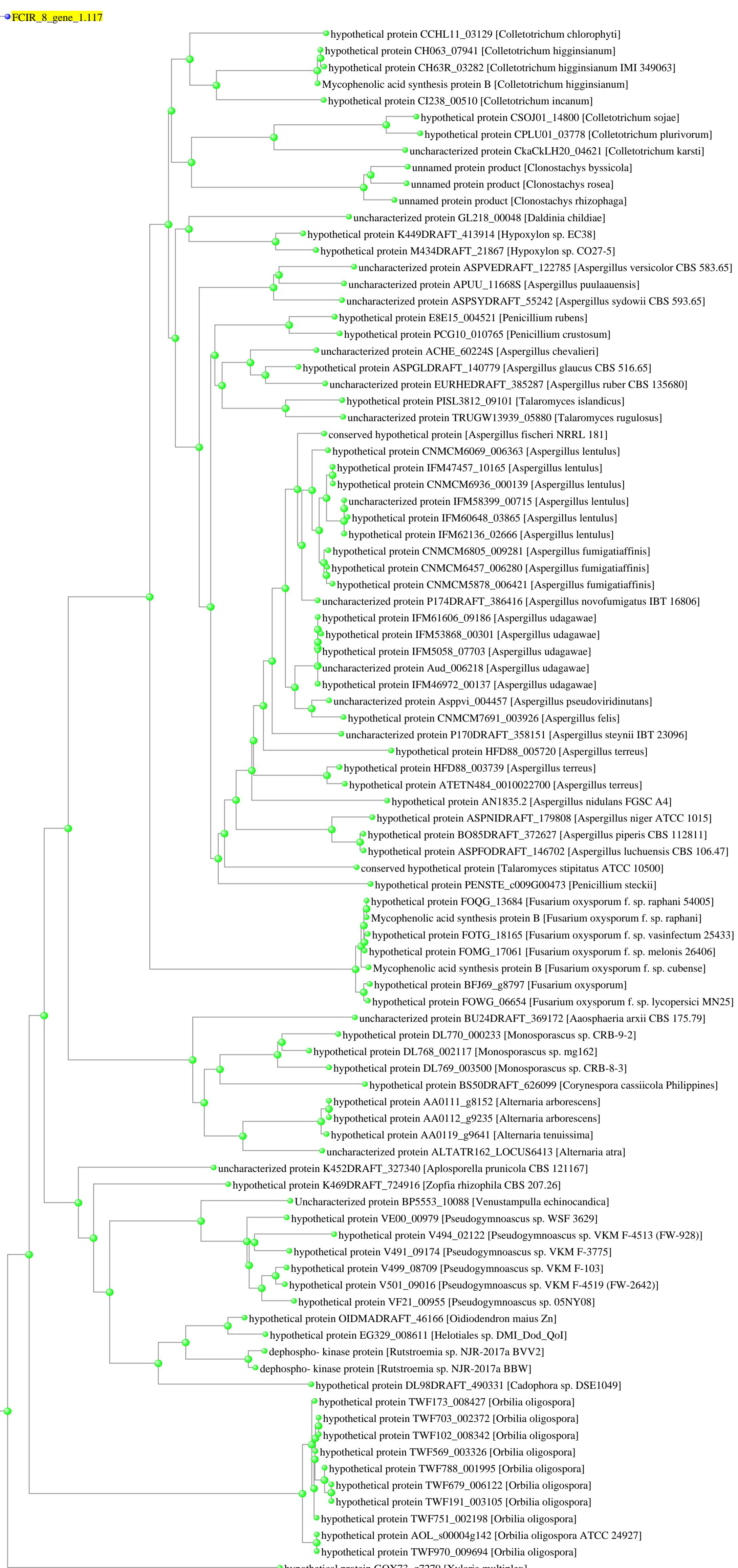


0.1

● C6 zinc finger domain-containing protein [Pochonia chlamydosporia 170]



0.2



0.08

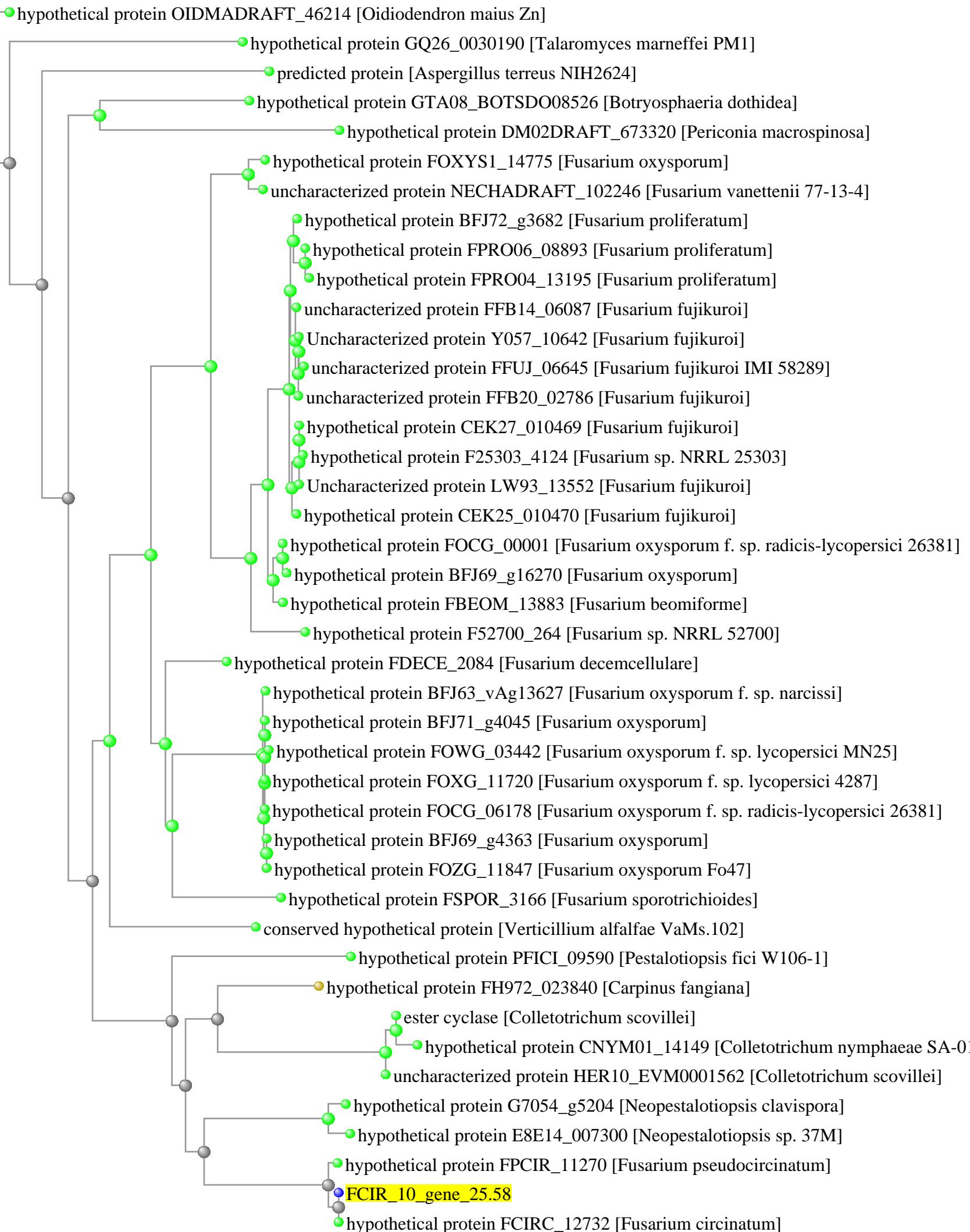


● putative acetyl-CoA C-acyltransferase precursor [Fusarium bulbicola]

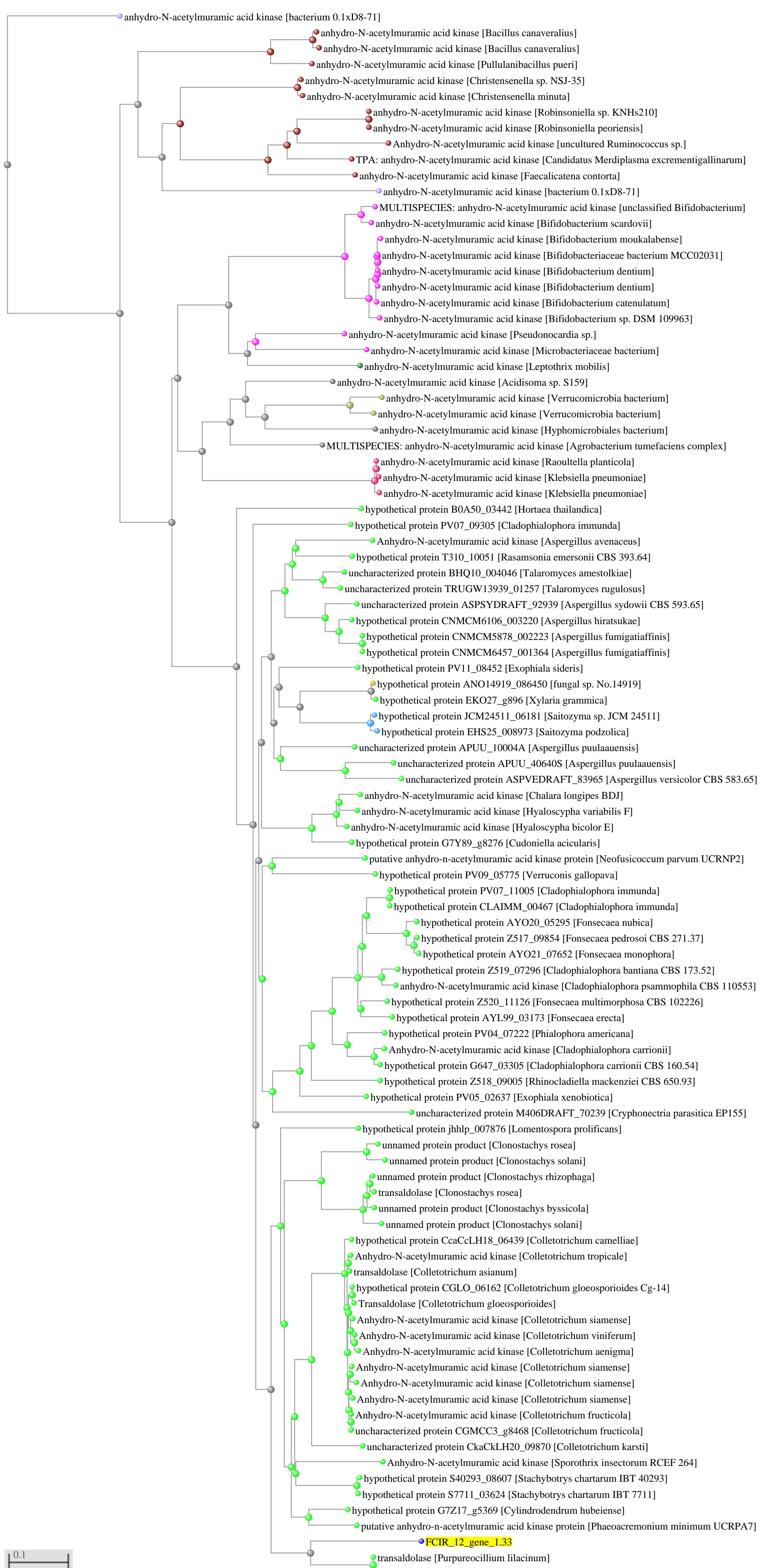
● FCIR_8_gene_22.83

- hypothetical protein KCU93_g1109 [Aureobasidium melanogenum]
- hypothetical protein KCU92_g5747 [Aureobasidium melanogenum]
- hypothetical protein KCV07_g9938 [Aureobasidium melanogenum]
- hypothetical protein COCMIDRAFT_270 [Bipolaris oryzae ATCC 44560]
- hypothetical protein COCCADRAFT_25253 [Bipolaris zeicola 26-R-13]
- hypothetical protein COCVIDRAFT_84330 [Bipolaris victoriae FI3]
- uncharacterized protein COCSADRAFT_165269 [Bipolaris sorokiniana ND90Pr]
- hypothetical protein GGP41_000473 [Bipolaris sorokiniana]
- 3-carboxy-cis,cis-mucoante lactonizing enzyme [Stagonospora sp. SRC1lsM3a]
- hypothetical protein E8E13_002024 [Curvularia kusanoi]
- hypothetical protein MAPG_02257 [Magnaporthe poae ATCC 64411]
- carboxy-cis,cis-muconate cyclase [Colletotrichum plurivorum]
- unnamed protein product [Clonostachys rosea]
- hypothetical protein PENARI_c045G03755 [Penicillium arizone

0.1



0.1



● HET-domain-containing protein [Lophium mytilinum]

● FTEMP_4_gene_41.77

● HET-domain-containing protein [Pyrenophaeta sp. DS3sAY3a]

● hypothetical protein B5807_12061 [Epicoccum nigrum]

● uncharacterized protein COCSADRAFT_29184 [Bipolaris sorokiniana N...]

● hypothetical protein GGP41_009825 [Bipolaris sorokiniana]

● hypothetical protein COCMIDRAFT_32457 [Bipolaris oryzae ATCC 44...]

● hypothetical protein COCCADRAFT_23333 [Bipolaris zeicola 26-R-13]

● HET-domain-containing protein [Cadophora sp. DSE1049]

● HET domain-containing protein [Rutstroemia sp. NJR-2017a BBW]

● HET-domain-containing protein [Chalara longipes BDJ]



● hypothetical protein PV06_11284 [Exophiala oligosperma]

● hypothetical protein Z520_09670 [Fonsecaea multimorphosa CBS 102226]

● hypothetical protein AYL99_10563 [Fonsecaea erecta]

● hypothetical protein Z519_12399 [Cladophialophora bantiana CBS 173.52]

● hypothetical protein A1O5_12312 [Cladophialophora psammophila CBS 1105...]

● hypothetical protein CLAIMM_05461 [Cladophialophora immunda]

● hypothetical protein Z517_12452 [Fonsecaea pedrosoi CBS 271.37]

● hypothetical protein AYO20_08290 [Fonsecaea nubica]

● hypothetical protein PV08_05100 [Exophiala spinifera]

● hypothetical protein AYL99_08234 [Fonsecaea erecta]

● FTEMP_5_gene_8.52

● hypothetical protein PV06_02857 [Exophiala oligosperma]

● hypothetical protein AYO21_05615 [Fonsecaea monophora]

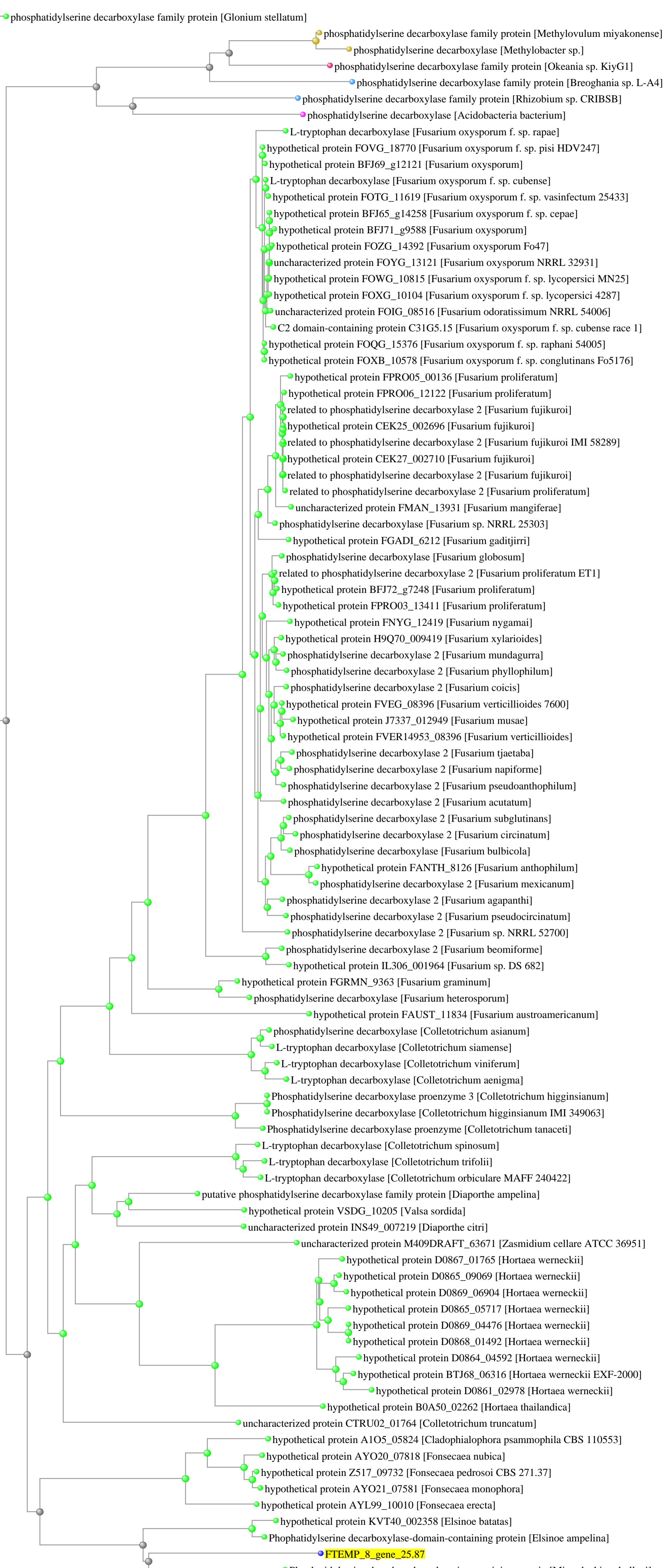
● hypothetical protein Z517_07345 [Fonsecaea pedrosoi CBS 271.37]

● hypothetical protein AYO20_05763 [Fonsecaea nubica]

● hypothetical protein Z520_04322 [Fonsecaea multimorphosa CBS 102226]

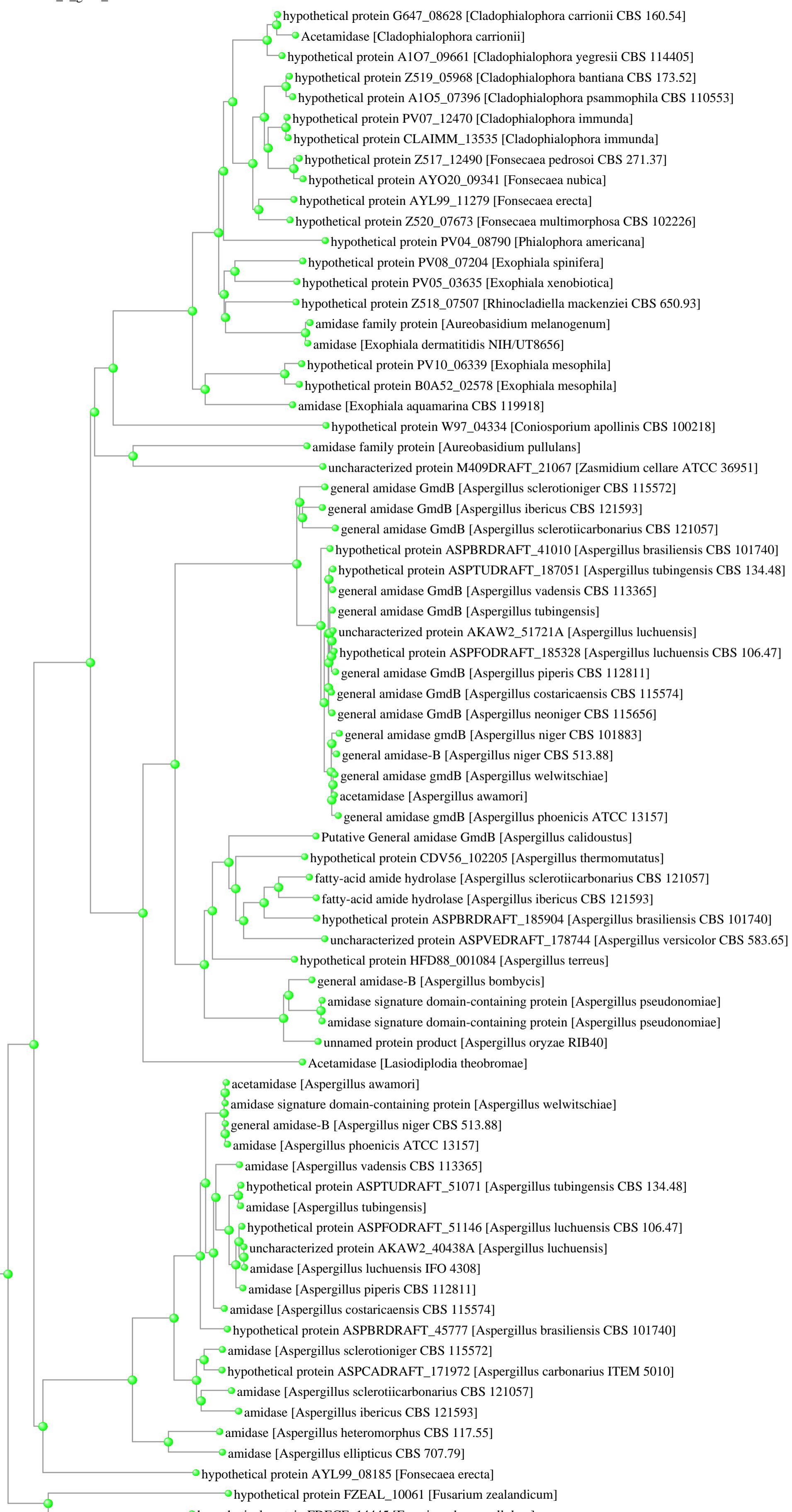
● hypothetical protein Z518_00884 [Rhinocladiella mackenziei CBS 650.93]

0.2



0.1

FTEMP_8_gene_26.79



0.1

pyridoxal phosphate-dependent transferase [Delphinella strobiligena]

- hypothetical protein BOTCAL_0713g00020 [Botryotinia calthae]
- hypothetical protein BCON_0621g00010 [Botryotinia convoluta]
- hypothetical protein BTUL_0303g00010 [Botrytis tulipae]

FTEMP_12_gene_4.36

- Glutamate decarboxylase like protein [Verticillium longisporum]
- hypothetical protein VdG1_06400 [Verticillium dahliae VDG1]
- hypothetical protein VDGE_08189 [Verticillium dahliae]
- glutamate decarboxylase [Verticillium dahliae VdLs.17]
- UPF0586 protein C9orf41-like protein [Verticillium dahliae VDG2]
- Glutamate decarboxylase like protein [Verticillium longisporum]
- hypothetical protein BN1708_009298 [Verticillium longisporum]
- uncharacterized protein D7B24_008630 [Verticillium nonalfalfaef]
- glutamate decarboxylase [Verticillium alfalfaef VaMs.102]

