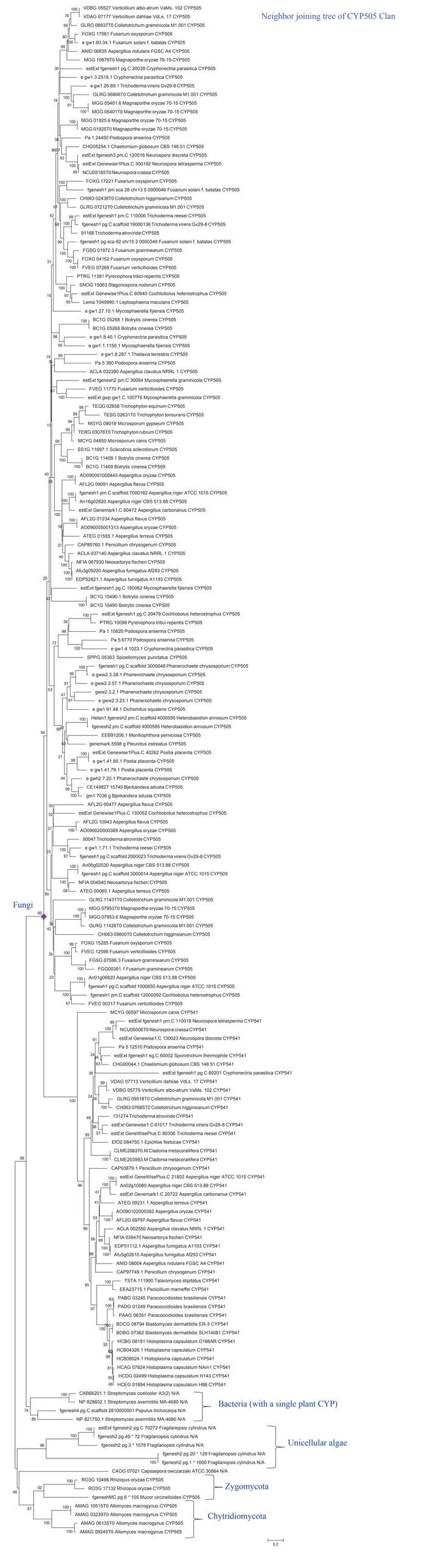
Neighbor joining tree of CYP505 Clan
VDBG 05527 Verticillium albo-atrum VaMs. 102 CYP505
VDAG 07177 Verticillium dahliae VdLs. 17 CYP505
GLRG 08937T0 Colletotrichum graminicola M1.001 CYP505
FOXG 17581 Fusarium oxysporum CYP505
e gw1.60.34.1 Fusarium solani f. batatas CYP505
ANID 06835 Aspergillus nidulans FGSC A4 CYP505
MGG 10879T0 Magnaporthe oryzae 70-15 CYP505
estExt fgenesh1 pg.C 20039 Cryphonectria parasitica CYP505
e gw1.3.2518.1 Cryphonectria parasitica CYP505
e gw1.26.89.1 Trichoderma virens Gv29-8 CYP505
GLRG 06866T0 Colletotrichum graminicola M1.001 CYP505
MGG 05401.6 Magnaporthe oryzae 70-15 CYP505
MGG 05401T0 Magnaporthe oryzae 70-15 CYP505
MGG 01925.6 Magnaporthe oryzae 70-15 CYP505
MGG 01925T0 Magnaporthe oryzae 70-15 CYP505
Pa 1 24450 Podospora anserina CYP505
CHG05254.1 Chaetomium globosum CBS 148.51 CYP505
estExt fgenesh3 pm.C 120016 Neurospora discreta CYP505
estExt Genewise1Plus.C 300192 Neurospora tetrasperma CYP505
NCU05185T0 Neurospora crassa CYP505
FOXG 17221 Fusarium oxysporum CYP505
fgenesh1 pm.sca 28 chr13 5 0000046 Fusarium solani f. batatas CYP505
CH063 02438T0 Colletotrichum higginsianum CYP505
GLRG 07212T0 Colletotrichum graminicola M1.001 CYP505
estExt fgenesh1 pm.C 110006 Trichoderma reesei CYP505
fgenesh1 pg.C scaffold 19000136 Trichoderma virens Gv29-8 CYP505
91168 Trichoderma atroviride CYP505
fgenesh1 pg.sca 82 chr10 2 0000349 Fusarium solani f. batatas CYP505
FGSG 01972.3 Fusarium graminearum CYP505
FOXG 04152 Fusarium oxysporum CYP505
FVEG 07269 Fusarium verticillioides CYP505
PTRG 11381 Pyrenophora tritici-repentis CYP505
SNOG 15063 Stagonospora nodorum CYP505
estExt Genewise1Plus.C 60940 Cochliobolus heterostrophus CYP505
Lema T049990.1 Leptosphaeria maculans CYP505
e gw1.27.10.1 Mycosphaerella fijiensis CYP505
BC1G 05268.1 Botrytis cinerea CYP505
BC1G 05268 Botrytis cinerea CYP505
e gw1.8.40.1 Cryphonectria parasitica CYP505
e gw1.1.1150.1 Mycosphaerella fijiensis CYP505
e gw1.8.287.1 Thielavia terrestris CYP505
Pa 5 360 Podospora anserina CYP505
ACLA 032390 Aspergillus clavatus NRRL 1 CYP505
estExt fgenesh2 pm.C 30054 Mycosphaerella graminicola CYP505
FVEG 11770 Fusarium verticillioides CYP505
estExt gwp gw1.C 100776 Mycosphaerella graminicola CYP505
TEQG 02858 Trichophyton equinum CYP505
TESG 02631T0 Trichophyton tonsurans CYP505
MGYG 08018 Microsporum gypseum CYP505
TERG 03078T0 Trichophyton rubrum CYP505
MCYG 04850 Microsporum canis CYP505
SS1G 11697.1 Sclerotinia sclerotiorum CYP505
BC1G 11409.1 Botrytis cinerea CYP505
BC1G 11409 Botrytis cinerea CYP505
AO090001000445 Aspergillus oryzae CYP505
AFL2G 09091 Aspergillus flavus CYP505
fgenesh1 pm.C scaffold 7000162 Aspergillus niger ATCC 1015 CYP505
An16g02820 Aspergillus niger CBS 513.88 CYP505
estExt Genemark1.C 60472 Aspergillus carbonarius CYP505
AFL2G 01234 Aspergillus flavus CYP505
AO090005001313 Aspergillus oryzae CYP505
ATEG 01555.1 Aspergillus terreus CYP505
CAP85760.1 Penicillium chrysogenum CYP505
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NFIA 067930 Neosartorya fischeri CYP505
Afu3g09220 Aspergillus fumigatus Af293 CYP505
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estExt fgenesh1 pg.C 180062 Mycosphaerella fijiensis CYP505
BC1G 15490.1 Botrytis cinerea CYP505
BC1G 15490 Botrytis cinerea CYP505
estExt fgenesh1 pg.C 20479 Cochliobolus heterostrophus CYP505
PTRG 10098 Pyrenophora tritici-repentis CYP505
Pa 1 10820 Podospora anserina CYP505
Pa 5 6770 Podospora anserina CYP505
e gw1.4.1023.1 Cryphonectria parasitica CYP505
SPPG 05363 Spizellomyces punctatus CYP505
fgenesh1 pg.C scaffold 3000048 Phanerochaete chrysosporium CYP505
e gww2.3.38.1 Phanerochaete chrysosporium CYP505
e gww2.3.57.1 Phanerochaete chrysosporium CYP505
gww2.3.2.1 Phanerochaete chrysosporium CYP505
e gww2.3.23.1 Phanerochaete chrysosporium CYP505
e gw1.91.48.1 Dichomitus squalens CYP505
Hetan1.fgenesh2 pm.C scaffold 4000595 Heterobasidion annosum CYP505
fgenesh2 pm.C scaffold 4000595 Heterobasidion annosum CYP505
EEB91206.1 Moniliophthora perniciosa CYP505
genemark.5598 g Pleurotus ostreatus CYP505
estExt Genewise1Plus.C 40262 Postia placenta CYP505
e gw1.41.80.1 Postia placenta CYP505
e gw1.41.79.1 Postia placenta CYP505
e gwh2.7.20.1 Phanerochaete chrysosporium CYP505
CE149827 15745 Bjerkandera adusta CYP505
gm1.7036 g Bjerkandera adusta CYP505
AFL2G 00477 Aspergillus flavus CYP505
estExt Genewise1Plus.C 130052 Cochliobolus heterostrophus CYP505
AFL2G 10943 Aspergillus flavus CYP505
AO090020000369 Aspergillus oryzae CYP505
50047 Trichoderma atroviride CYP505
e gw1.1.71.1 Trichoderma reesei CYP505
fgenesh1 pg.C scaffold 2000023 Trichoderma virens Gv29-8 CYP505
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fgenesh1 pg.C scaffold 3000014 Aspergillus niger ATCC 1015 CYP505
NFIA 004540 Neosartorya fischeri CYP505
ATEG 00065.1 Aspergillus terreus CYP505
Fungi
GLRG 11431T0 Colletotrichum graminicola M1.001 CYP505
MGG 07953T0 Magnaporthe oryzae 70-15 CYP505
MGG 07953.6 Magnaporthe oryzae 70-15 CYP505
GLRG 11426T0 Colletotrichum graminicola M1.001 CYP505
CH063 09800T0 Colletotrichum higginsianum CYP505
FOXG 15285 Fusarium oxysporum CYP505
FVEG 12598 Fusarium verticillioides CYP505
FGSG 07596.3 Fusarium graminearum CYP505
FGG00391.1 Fusarium graminearum CYP505
An01g06820 Aspergillus niger CBS 513.88 CYP505
fgenesh1 pg.C scaffold 1000650 Aspergillus niger ATCC 1015 CYP505
fgenesh1 pm.C scaffold 12000092 Cochliobolus heterostrophus CYP505
FVEG 00317 Fusarium verticillioides CYP505
MCYG 06597 Microsporum canis CYP541
estExt fgenesh1 pm.C 110018 Neurospora tetrasperma CYP541
NCU05006T0 Neurospora crassa CYP541
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Pa 5 12510 Podospora anserina CYP541
estExt fgenesh1 kg.C 60002 Sporotrichum thermophile CYP541
CHG00044.1 Chaetomium globosum CBS 148.51 CYP541
estExt fgenesh1 pg.C 80201 Cryphonectria parasitica CYP541
VDAG 07713 Verticillium dahliae VdLs. 17 CYP541
VDBG 05779 Verticillium albo-atrum VaMs. 102 CYP541
GLRG 09518T0 Colletotrichum graminicola M1.001 CYP541
CH063 07685T0 Colletotrichum higginsianum CYP541
131274 Trichoderma atroviride CYP541
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estExt GeneWisePlus.C 80306 Trichoderma reesei CYP541
EfO2.084750.1 Epichloe festucae CYP541
CLME208370.M Cladonia metacorallifera CYP541
CLME203983.M Cladonia metacorallifera CYP541
CAP93879.1 Penicillium chrysogenum CYP541
estExt GeneWisePlus.C 21802 Aspergillus niger ATCC 1015 CYP541
An02g10080 Aspergillus niger CBS 513.88 CYP541
estExt Genemark1.C 20722 Aspergillus carbonarius CYP541
ATEG 09231.1 Aspergillus terreus CYP541
AO090102000382 Aspergillus oryzae CYP541
AFL2G 09797 Aspergillus flavus CYP541
ACLA 002550 Aspergillus clavatus NRRL 1 CYP541
NFIA 039470 Neosartorya fischeri CYP541
EDP51112.1 Aspergillus fumigatus A1193 CYP541
Afu5g02610 Aspergillus fumigatus Af293 CYP541
ANID 08004 Aspergillus nidulans FGSC A4 CYP541
CAP97749.1 Penicillium chrysogenum CYP541
TSTA 111990 Talaromyces stipitatus CYP541
EEA23715.1 Penicillium marneffei CYP541
PABG 03245 Paracoccidioides brasiliensis CYP541
PADG 01249 Paracoccidioides brasiliensis CYP541
PAAG 06351 Paracoccidioides brasiliensis CYP541
BDCG 08794 Blastomyces dermatitidis ER-3 CYP541
BDBG 07362 Blastomyces dermatitidis SLH14081 CYP541
HCBG 08191 Histoplasma capsulatum G186AR CYP541
HCB04326.1 Histoplasma capsulatum CYP541
HCB08024.1 Histoplasma capsulatum CYP541
HCAG 07824 Histoplasma capsulatum NAm1 CYP541
HCDG 02499 Histoplasma capsulatum H143 CYP541
HCEG 01894 Histoplasma capsulatum H88 CYP541
CAB66201.1 Streptomyces coelicolor A3(2) N/A
NP 828602.1 Streptomyces avermitilis MA-4680 N/A
fgeneshl pg.C scaffold 2810000001 Populus trichocarpa N/A
NP 821750.1 Streptomyces avermitilis MA-4680 N/A
Bacteria (with a single plant CYP)
estExt fgenesh2 pg.C 70272 Fragilariopsis cylindrus N/A
fgenesh2 pg.49 * 72 Fragilariopsis cylindrus N/A
fgenesh2 pg.3 * 1078 Fragilariopsis cylindrus N/A
fgenesh2 pg.20 * 129 Fragilariopsis cylindrus N/A
fgenesh2 pg.1 * 1600 Fragilariopsis cylindrus N/A
Unicellular algae
CAOG 07021 Capsaspora owczarzaki ATCC 30864 N/A
RO3G 10498 Rhizopus oryzae CYP505
RO3G 17132 Rhizopus oryzae CYP505
fgeneshMC pg.8 * 105 Mucor circinelloides CYP505
Zygomycota
AMAG 10515T0 Allomyces macrogynus CYP505
AMAG 03239T0 Allomyces macrogynus CYP505
AMAG 06135T0 Allomyces macrogynus CYP505
AMAG 09245T0 Allomyces macrogynus CYP505
Chytridiomycota
0.2