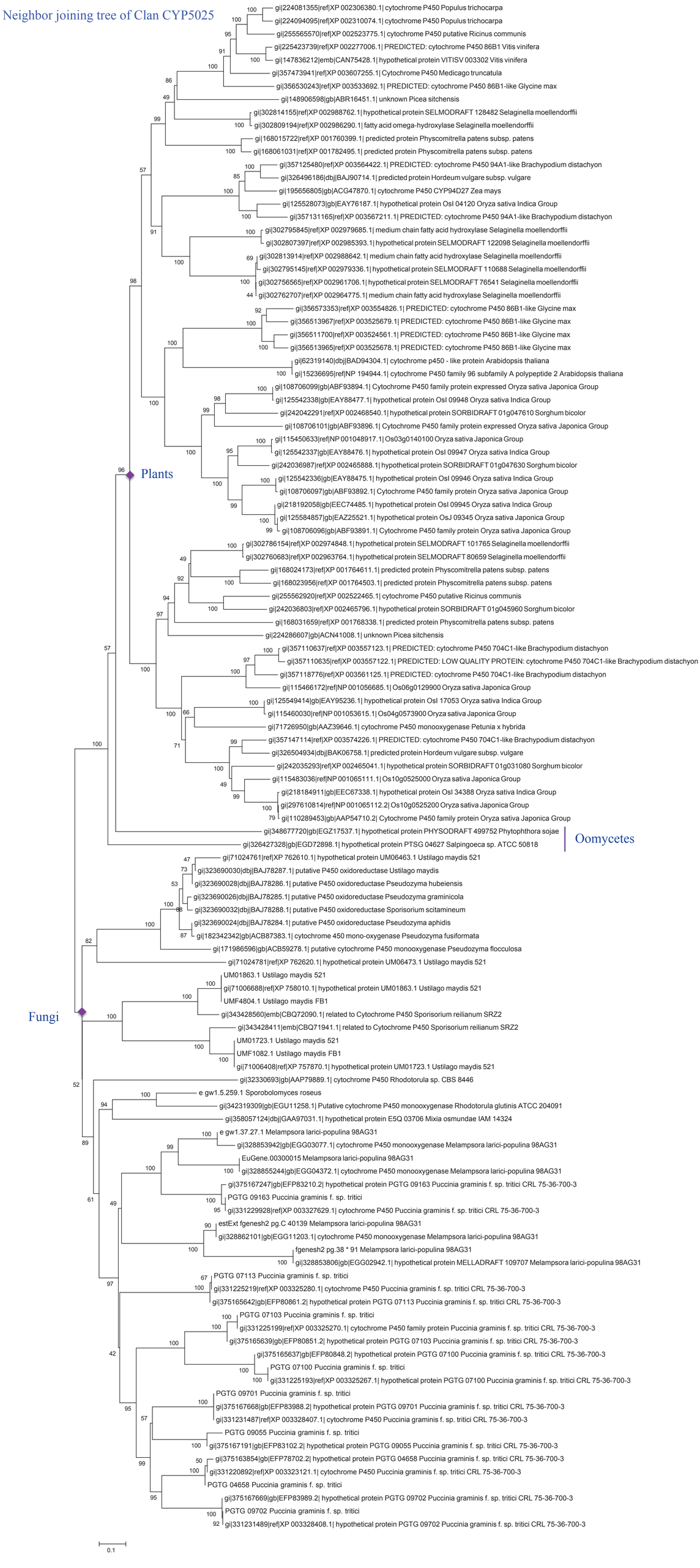
Neighbor joining tree of Clan CYP5025
gi|224081355|ref|XP 002306380.1| cytochrome P450 Populus trichocarpa
gi|224094095|ref|XP 002310074.1| cytochrome P450 Populus trichocarpa
gi|255565570|ref|XP 002523775.1| cytochrome P450 putative Ricinus communis
gi|225423739|ref|XP 002277006.1| PREDICTED: cytochrome P450 86B1 Vitis vinifera
gi|147836212|emb|CAN75428.1| hypothetical protein VITISV 003302 Vitis vinifera
gi|357473941|ref|XP 003607255.1| Cytochrome P450 Medicago truncatula
gi|356530243|ref|XP 003533692.1| PREDICTED: cytochrome P450 86B1-like Glycine max
gi|148906598|gb|ABR16451.1| unknown Picea sitchensis
gi|302814155|ref|XP 002988762.1| hypothetical protein SELMODRAFT 128482 Selaginella moellendorffii
gi|302809194|ref|XP 002986290.1| fatty acid omega-hydroxylase Selaginella moellendorffii
gi|168015722|ref|XP 001760399.1| predicted protein Physcomitrella patens subsp. patens
gi|168061031|ref|XP 001782495.1| predicted protein Physcomitrella patens subsp. patens
gi|357125480|ref|XP 003564422.1| PREDICTED: cytochrome P450 94A1-like Brachypodium distachyon
gi|326496186|dbj|BAJ90714.1| predicted protein Hordeum vulgare subsp. vulgare
gi|195656805|gb|ACG47870.1| cytochrome P450 CYP94D27 Zea mays
gi|125528073|gb|EAY76187.1| hypothetical protein Osl 04120 Oryza sativa Indica Group
gi|357131165|ref|XP 003567211.1| PREDICTED: cytochrome P450 94A1-like Brachypodium distachyon
gi|302795845|ref|XP 002979685.1| medium chain fatty acid hydroxylase Selaginella moellendorffii
gi|302807397|ref|XP 002985393.1| hypothetical protein SELMODRAFT 122098 Selaginella moellendorffii
gi|302813914|ref|XP 002988642.1| medium chain fatty acid hydroxylase Selaginella moellendorffii
gi|302795145|ref|XP 002979336.1| hypothetical protein SELMODRAFT 110688 Selaginella moellendorffii
gi|302756565|ref|XP 002961706.1| hypothetical protein SELMODRAFT 76541 Selaginella moellendorffii
gi|302762707|ref|XP 002964775.1| medium chain fatty acid hydroxylase Selaginella moellendorffii
gi|356573353|ref|XP 003554826.1| PREDICTED: cytochrome P450 86B1-like Glycine max
gi|356513967|ref|XP 003525679.1| PREDICTED: cytochrome P450 86B1-like Glycine max
gi|356511700|ref|XP 003524561.1| PREDICTED: cytochrome P450 86B1-like Glycine max
gi|356513965|ref|XP 003525678.1| PREDICTED: cytochrome P450 86B1-like Glycine max
gi|62319140|dbj|BAD94304.1| cytochrome p450 - like protein Arabidopsis thaliana
gi|15236695|ref|NP 194944.1| cytochrome P450 family 96 subfamily A polypeptide 2 Arabidopsis thaliana
gi|108706099|gb|ABF93894.1| Cytochrome P450 family protein expressed Oryza sativa Japonica Group
gi|125542338|gb|EAY88477.1| hypothetical protein Osl 09948 Oryza sativa Indica Group
gi|242042291|ref|XP 002468540.1| hypothetical protein SORBIDRAFT 01g047610 Sorghum bicolor
gi|108706101|gb|ABF93896.1| Cytochrome P450 family protein expressed Oryza sativa Japonica Group
gi|115450633|ref|NP 001048917.1| Os03g0140100 Oryza sativa Japonica Group
gi|125542337|gb|EAY88476.1| hypothetical protein Osl 09947 Oryza sativa Indica Group
gi|242036987|ref|XP 002465888.1| hypothetical protein SORBIDRAFT 01g047630 Sorghum bicolor
gi|125542336|gb|EAY88475.1| hypothetical protein Osl 09946 Oryza sativa Indica Group
gi|108706097|gb|ABF93892.1| Cytochrome P450 family protein Oryza sativa Japonica Group
gi|218192058|gb|EEC74485.1| hypothetical protein Osl 09945 Oryza sativa Indica Group
gi|125584857|gb|EAZ25521.1| hypothetical protein OsJ 09345 Oryza sativa Japonica Group
gi|108706096|gb|ABF93891.1| Cytochrome P450 family protein Oryza sativa Japonica Group
gi|302786154|ref|XP 002974848.1| hypothetical protein SELMODRAFT 101765 Selaginella moellendorffii
gi|302760683|ref|XP 002963764.1| hypothetical protein SELMODRAFT 80659 Selaginella moellendorffii
gi|168024173|ref|XP 001764611.1| predicted protein Physcomitrella patens subsp. patens
gi|168023956|ref|XP 001764503.1| predicted protein Physcomitrella patens subsp. patens
gi|255562920|ref|XP 002522465.1| cytochrome P450 putative Ricinus communis
gi|242036803|ref|XP 002465796.1| hypothetical protein SORBIDRAFT 01g045960 Sorghum bicolor
gi|168031659|ref|XP 001768338.1| predicted protein Physcomitrella patens subsp. patens
gi|224286607|gb|ACN41008.1| unknown Picea sitchensis
gi|357110637|ref|XP 003557123.1| PREDICTED: cytochrome P450 704C1-like Brachypodium distachyon
gi|357110635|ref|XP 003557122.1| PREDICTED: LOW QUALITY PROTEIN: cytochrome P450 704C1-like Brachypodium distachyon
gi|357118776|ref|XP 003561125.1| PREDICTED: cytochrome P450 704C1-like Brachypodium distachyon
gi|115466172|ref|NP 001056685.1| Os06g0129900 Oryza sativa Japonica Group
gi|125549414|gb|EAY95236.1| hypothetical protein Osl 17053 Oryza sativa Indica Group
gi|115460030|ref|NP 001053615.1| Os04g0573900 Oryza sativa Japonica Group
gi|71726950|gb|AAZ39646.1| cytochrome P450 monooxygenase Petunia x hybrida
gi|357147114|ref|XP 003574226.1| PREDICTED: cytochrome P450 704C1-like Brachypodium distachyon
gi|326504934|dbj|BAK06758.1| predicted protein Hordeum vulgare subsp. vulgare
gi|242035293|ref|XP 002465041.1| hypothetical protein SORBIDRAFT 01g031080 Sorghum bicolor
gi|115483036|ref|NP 001065111.1| Os10g0525000 Oryza sativa Japonica Group
gi|218184911|gb|EEC67338.1| hypothetical protein Osl 34388 Oryza sativa Indica Group
gi|297610814|ref|NP 001065112.2| Os10g0525200 Oryza sativa Japonica Group
gi|110289453|gb|AAP54710.2| Cytochrome P450 family protein Oryza sativa Japonica Group
gi|348677720|gb|EGZ17537.1| hypothetical protein PHYSODRAFT 499752 Phytophthora sojae
gi|326427328|gb|EGD72898.1| hypothetical protein PTSG 04627 Salpingoeca sp. ATCC 50818
Plants
Oomycetes
gi|71024761|ref|XP 762610.1| hypothetical protein UM06463.1 Ustilago maydis 521
gi|323690030|dbj|BAJ78287.1| putative P450 oxidoreductase Ustilago maydis
gi|323690028|dbj|BAJ78286.1| putative P450 oxidoreductase Pseudozyma hubeiensis
gi|323690026|dbj|BAJ78285.1| putative P450 oxidoreductase Pseudozyma graminicola
gi|323690032|dbj|BAJ78288.1| putative P450 oxidoreductase Sporisorium scitamineum
gi|323690024|dbj|BAJ78284.1| putative P450 oxidoreductase Pseudozyma aphidis
gi|182342342|gb|ACB87383.1| cytochrome 450 mono-oxygenase Pseudozyma fusiformata
gi|171986596|gb|ACB59278.1| putative cytochrome P450 monooxygenase Pseudozyma flocculosa
gi|71024781|ref|XP 762620.1| hypothetical protein UM06473.1 Ustilago maydis 521
UM01863.1 Ustilago maydis 521
gi|71006688|ref|XP 758010.1| hypothetical protein UM01863.1 Ustilago maydis 521
UMF4804.1 Ustilago maydis FB1
gi|343428560|emb|CBQ72090.1| related to Cytochrome P450 Sporisorium reilianum SRZ2
gi|343428411|emb|CBQ71941.1| related to Cytochrome P450 Sporisorium reilianum SRZ2
UM01723.1 Ustilago maydis 521
UMF1082.1 Ustilago maydis FB1
gi|71006408|ref|XP 757870.1| hypothetical protein UM01723.1 Ustilago maydis 521
Fungi
gi|32330693|gb|AAP79889.1| cytochrome P450 Rhodotorula sp. CBS 8446
e gw1.5.259.1 Sporobolomyces roseus
gi|342319309|gb|EGU11258.1| Putative cytochrome P450 monooxygenase Rhodotorula glutinis ATCC 204091
gi|358057124|dbj|GAA97031.1| hypothetical protein E5Q 03706 Mixia osmundae IAM 14324
e gw1.37.27.1 Melampsora larici-populina 98AG31
gi|328853942|gb|EGG03077.1| cytochrome P450 monooxygenase Melampsora larici-populina 98AG31
EuGene.00300015 Melampsora larici-populina 98AG31
gi|328855244|gb|EGG04372.1| cytochrome P450 monooxygenase Melampsora larici-populina 98AG31
gi|375167247|gb|EFP83210.2| hypothetical protein PGTG 09163 Puccinia graminis f. sp. tritici CRL 75-36-700-3
PGTG 09163 Puccinia graminis f. sp. tritici
gi|331229928|ref|XP 003327629.1| cytochrome P450 Puccinia graminis f. sp. tritici CRL 75-36-700-3
estExt fgenesh2 pg.C 40139 Melampsora larici-populina 98AG31
gi|328862101|gb|EGG11203.1| cytochrome P450 monooxygenase Melampsora larici-populina 98AG31
fgenesh2 pg.38 * 91 Melampsora larici-populina 98AG31
gi|328853806|gb|EGG02942.1| hypothetical protein MELLADRAFT 109707 Melampsora larici-populina 98AG31
PGTG 07113 Puccinia graminis f. sp. tritici
gi|331225219|ref|XP 003325280.1| cytochrome P450 Puccinia graminis f. sp. tritici CRL 75-36-700-3
gi|375165642|gb|EFP80861.2| hypothetical protein PGTG 07113 Puccinia graminis f. sp. tritici CRL 75-36-700-3
PGTG 07103 Puccinia graminis f. sp. tritici
gi|331225199|ref|XP 003325270.1| cytochrome P450 family protein Puccinia graminis f. sp. tritici CRL 75-36-700-3
gi|375165639|gb|EFP80851.2| hypothetical protein PGTG 07103 Puccinia graminis f. sp. tritici CRL 75-36-700-3
gi|375165637|gb|EFP80848.2| hypothetical protein PGTG 07100 Puccinia graminis f. sp. tritici CRL 75-36-700-3
PGTG 07100 Puccinia graminis f. sp. tritici
gi|331225193|ref|XP 003325267.1| hypothetical protein PGTG 07100 Puccinia graminis f. sp. tritici CRL 75-36-700-3
PGTG 09701 Puccinia graminis f. sp. tritici
gi|375167668|gb|EFP83988.2| hypothetical protein PGTG 09701 Puccinia graminis f. sp. tritici CRL 75-36-700-3
gi|331231487|ref|XP 003328407.1| cytochrome P450 Puccinia graminis f. sp. tritici CRL 75-36-700-3
PGTG 09055 Puccinia graminis f. sp. tritici
gi|375167191|gb|EFP83102.2| hypothetical protein PGTG 09055 Puccinia graminis f. sp. tritici CRL 75-36-700-3
gi|375163854|gb|EFP78702.2| hypothetical protein PGTG 04658 Puccinia graminis f. sp. tritici CRL 75-36-700-3
gi|331220892|ref|XP 003323121.1| cytochrome P450 Puccinia graminis f. sp. tritici CRL 75-36-700-3
PGTG 04658 Puccinia graminis f. sp. tritici
gi|375167669|gb|EFP83989.2| hypothetical protein PGTG 09702 Puccinia graminis f. sp. tritici CRL 75-36-700-3
PGTG 09702 Puccinia graminis f. sp. tritici
gi|331231489|ref|XP 003328408.1| hypothetical protein PGTG 09702 Puccinia graminis f. sp. tritici CRL 75-36-700-3
0.1