NP 849693.1¦ O-methyltransferase [Arabidopsis thaliana] (identical to At1g21130)
NP 176502.2¦ O-methyltransferase/ S-adenosylmethionine-dependent methyltransferase [Arabidopsis thaliana] (identical to At1g63140)
NP 198533.1¦ O-methyltransferase [Arabidopsis thaliana] (identical to At5g37170)
NP 176478.1¦ O-methyltransferase/ S-adenosylmethionine-dependent methyltransferase [Arabidopsis thaliana] (identical to A1g62900)
NP 195241.1¦ O-methyltransferase/ S-adenosylmethionine-dependent methyltransferase [Arabidopsis thaliana] (identical to At4g35150)
ABA96096.1¦ O-methyltransferase, putative [Oryza sativa (japonica cultivar-group)]
CAJ43721.1¦ caffeoyl-CoA O-methyltransferase [Plantago major]
AAQ07451.1¦ caffeic acid O-methyltransferase [Triticum aestivum]
CAA52461.1¦ catechol O-methyltransferase [Nicotiana tabacum]
CAA52462.1¦ catechol O-methyltransferase [Nicotiana tabacum]
CAI78904.1¦ putative orthomethyl transferase [Nicotiana tabacum]
AAD50439.1¦ caffeic acid O-methyltransferase [Eucalyptus globulus]
AAD50440.1¦ caffeic acid O-methyltransferase [Eucalyptus globulus]
CAE51884.1¦ putative caffeate o-methyltransferase [Schedonorus arundinaceus]
CAE51883.1¦ putative caffeate o-methyltransferase [Lolium multiflorum]
1FPQ¦A Chain A, Crystal Structure Analysis Of Selenomethionine Substituted Chalcone O-Methyltransferase
AAM97497.1¦ flavonoid O-methyltransferase [Catharanthus roseus]
AAT08695.1¦ O-methyltransferase [Hyacinthus orientalis]
AAA34088.1¦ O-methyltransferase
AAO12872.1¦ putative O-methyltransferase [Vitis vinifera]
AAV36367.1¦ caffeate O-methyltransferase [Pinus taeda]
AAV36331.1¦ caffeate O-methyltransferase [Pinus taeda]
AAV36364.1¦ caffeate O-methyltransferase [Pinus taeda]
AAV36354.1¦ caffeate O-methyltransferase [Pinus taeda]
AAV36346.1¦ caffeate O-methyltransferase [Pinus taeda]
AAV36362.1¦ caffeate O-methyltransferase [Pinus taeda]
AAV36366.1¦ caffeate O-methyltransferase [Pinus taeda]
Smo COMT 1 1
Smo COMT 4 1
Smo COMT 7 1

were removed form this tree.

COMT(At1g21100): partial tree
File name: COMT.pt1.svg
107 aa residues 139 OTU included.
Results of Partial tree including Ppa.
Assemble Job Id: eRqsET selectNalign job id: 0V6KQY(200)
Tree job id: mE4OfN
BP values out of 100
Analyzed by ku-bo@nibb.ac.jp
Date: Tue Dec 26 20:21:14 JST 2006

AT1G21100 = NP_173534 AAF80651 AAK06867 AAL09769 AAN28913 O-methyltransferase/Contains similarity to O-Methyltransferase 1 from Arabidopsis thaliana gb|U70424. It is a member of O-methyltransferase family. ESTs gb|AI994826, gb|N65066 and gb|N38589
AT1G21120 = NP_173536 AAF80649 AAK06866 BAD94958 O-methyltransferase/Contains similarity to O-Methyltransferase 1 from Arabidopsis thaliana gb|U70424. It is a member of O-methyltransferase family. ESTs gb|AI993288 and gb|Z18076 come from this gene
AT1G21110 = NP_173535 AAF80650 BAC43382 AAO63966 O-methyltransferase/Contains similarity to O-Methyltransferase 1 from Arabidopsis thaliana gb|U70424. It is a member of O-methyltransferase family. ESTs gb|AI993288 and gb|Z18076 come from this gene
AAM67269 *Arabidopsis thaliana* **O-methyltransferase, putative**
AT1G21130 = NP_173537 AAF80648 O-methyltransferase/Contains similarity to caffeic acid 3-O-Methyltransferase from Saccharum officinarum gb|AJ231133. It is a member of O-methyltransferase family. ESTs gb|AI994592 and gb|T20793 come from this gene.
AAM66988 *Arabidopsis thaliana* **putative catechol O-methyltransferase**
AT1G76790 = NP_177805 AAF04440 AAO22765 AAO42382 O-methyltransferase/putative catechol O-methyltransferase; 60402-59127 /putative O-methyltransferase, family 2 protein /putative O-methyltransferase, family 2 protein
AT5G53810 = NP_200192 BAB09553 O-methyltransferase/caffeic acid 3-O-methyltransferase-like protein
AAM67233 *Arabidopsis thaliana* **caffeic acid 3-O-methyltransferase-like protein**
BAB11374 *Arabidopsis thaliana* **caffeic acid O-methyltransferase-like protein**
AT1G63140 = NP_974076 AAG51616 O-methyltransferase/S-adenosylmethionine-dependent methyltransferase /caffeic O-methyltransferase, putative; 68744-70102
AT1G77530 = NP_177877 AAG51679 O-methyltransferase/putative caffeic acid 3-O-methyltransferase; 46558-47944
AT1G77520 = NP_177876 AAG51676 AAM65299 AAO24573 O-methyltransferase/putative caffeic acid 3-O-methyltransferase; 41078-42528 /putative caffeic acid 3-O-methyltransferase /At1g77520
P28002 *Medicago sativa* 1KYW 1KYZ 1KYZ 1KYW 1KYW 1KYZ AAB46623 COMT1_MEDSA Caffeic acid 3-O-methyltransferase (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase) (COMT) (CAOMT)/A Chain A, Crystal Structure Analysis Of Caffeic Acid5-Hydroxyfer
AAY86361 *Acacia mangium* x *Acacia auriculiformis* caffeic acid O-methyltransferase
2119166A *Stylosanthes humilis* 2119166A caffeic acid O-methyltransferase
Q41086 *Populus tremuloides* AAB68049 COMT2_POPTM Caffeic acid 3-O-methyltransferase 2 (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase 2) (COMT-2) (CAOMT-2)/caffeic acid O-methyltransferase
Q43047 *Populus kitakamiensis* BAA08559 COMT3_POPKI Caffeic acid 3-O-methyltransferase 3 (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase 1) (COMT-3) (CAOMT-3)/caffeic acid O-methyltransferase
1906376A *Populus trichocarpa* x *Populus deltoides* Q00763 *Populus tremuloides* CAA44006 AAB61731 AAF60951 *Populus trichocarpa* x *Populus deltoides* 1906376A O-methyltransferase/COMT1_POPTM Caffeic acid 3-O-methyltransferase 1 (S-adenosysl-L-methion
AAF63200 *Populus tomentosa* caffeic acid O-3-methyltransferase
Q43046 *Populus kitakamiensis* BAA08558 COMT1_POPKI Caffeic acid 3-O-methyltransferase 1 (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase 1) (COMT-1) (CAOMT-1)/caffeic acid O-methyltransferase
AAQ01670 *Papaver somniferum* catechol O-methyltransferase
O81646 *Capsicum chinense* AAC78475 COMT1_CAPCH Caffeic acid 3-O-methyltransferase (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase) (COMT) (CAOMT)/caffeic acid-3-O-methyltransferase
T12259 *Capsicum annuum* Q9FQY8 AAC17455 T12259 O-diphenol-O-methyltransferase (EC 2.1.1.-) - pepper/COMT1_CAPAN Caffeic acid 3-O-methyltransferase (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase) (COMT) (CAOMT) /O-diphenol-O-methyltransfer
AAG43822 *Capsicum annuum* caffeic acid O-methyltransferase
P59049 *Chrysosplenium americanum* Q42653 AAA86982 OMT1_CHRAE Quercetin 3-O-methyltransferase 1 (Flavonol 3-O-methyltransferase 1)/OMT2_CHRAE Quercetin 3-O-methyltransferase 2 (Flavonol 3-O-methyltransferase 2)/caffeic acid O-methyl transferase
AAA80579 *Chrysosplenium americanum* 3' flavonoid O-methyltransferase
AAC18863 *Mesembryanthemum crystallinum* caffeic acid 3-O-methyltransferase
O04385 *Clarkia breweri* AAC01533 IEMT_CLABR (Iso)eugenol O-methyltransferase (S-adenosysl-L-methionine:(Iso)eugenol O-methyltransferase) (IEMT)/SAM:(Iso)eugenol O-methyltransferase
O23760 *Clarkia breweri* AAB71141 COMT1_CLABR Caffeic acid 3-O-methyltransferase (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase) (COMT) (CAOMT)/caffeic acid O-methyltransferase
P46484 *Eucalyptus gunnii* CAA52814 COMT1_EUCGU Caffeic acid 3-O-methyltransferase (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase) (COMT) (CAOMT)/0-Methyltransferase
Q8LL87 *Coffea canephora* AAN03727 COMT1_COFCA Caffeic acid 3-O-methyltransferase (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase) (COMT) (CAOMT)/caffeic acid O-methyltransferase
AAN03726 *Coffea canephora* caffeic acid O-methyltransferase
Q43239 *Zinnia elegans* AAA86718 COMT1_ZINEL Caffeic acid 3-O-methyltransferase (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase) (COMT) (CAOMT)/S-adenosyl-L-methionine:caffeic acid 3-O-methyltransferase
AAR24097 *Ammi majus* caffeic acid O-methyltransferase
Q8W013 *Catharanthus roseus* AAK20170 COMT1_CATRO Caffeic acid 3-O-methyltransferase (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase) (COMT) (CAOMT)/caffeic acid O-methyltransferase
Q9XGV9 *Ocimum basilicum* AAD38190 COMT2_OCIBA Caffeic acid 3-O-methyltransferase 2 (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase 2) (COMT-2) (CAOMT-2)/caffeic acid O-methyltransferase
Q9XGW0 *Ocimum basilicum* AAD38189 COMT1_OCIBA Caffeic acid 3-O-methyltransferase 1 (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase 1) (COMT-1) (CAOMT-1)/caffeic acid O-methyltransferase
AAD48913 *Liquidambar styraciflua* caffeate O-methyltransferase
AAR24096 *Ammi majus* bergaptol O-methyltransferase
AAF44672 *Vitis vinifera* caffeic acid O-methyltransferase
Q43609 *Prunus dulcis* CAA58218 COMT1_PRUDU Caffeic acid 3-O-methyltransferase (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase) (COMT) (CAOMT)/caffeic O-methyltransferase
Q8GU25 *Rosa chinensis* CAD29457 BAC78827 *Rosa chinensis var. spontanea* COMT1_ROSCH Caffeic acid 3-O-methyltransferase (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase) (COMT) (CAOMT)/caffeic acid O-methyltransferase /caffeic acid O-methyl
AAF28353 *Fragaria* x *ananassa* O-methyltransferase
AAD29845 *Thalictrum tuberosum* O-methyltransferase; Omt II;THATU;5
AAD29841 *Thalictrum tuberosum* AAD29842 AAD29843 AAD29844 catechol O-methyltransferase; Omt II;THATU;1/catechol O-methyltransferase; Omt II;THATU;2 /catechol O-methyltransferase; Omt II;THATU;3 /catechol O-methyltransferase; Omt II;THATU;4
AT5G54160 = NP_200227 Q9FK25 AAB96879 BAB11578 AAL32915 AAM10127 AAM64849 ATOMT1 (O-METHYLTRANSFERASE 1)/OMT1_ARATH Quercetin 3-O-methyltransferase 1 (AtOMT1) (Flavonol 3-O-methyltransferase 1) (Caffeic acid/5-hydroxyferulic acid O-methyltransferase
AAR09601 *Mentha* x *piperita* flavonoid 3'-O-methyltransferase
AAQ24339 *Zea mays* AAQ24355 O-methyltransferase/O-methyltransferase
AAQ24338 *Zea mays* AAQ24360 O-methyltransferase/O-methyltransferase
Q06509 *Zea mays* AAB03364 AAQ24337 AAQ24340 AAQ24341 AAQ24342 AAQ24343 AAQ24344 AAQ24345 AAQ24346 AAQ24347 AAQ24348 AAQ24349 AAQ24350 AAQ24351 AAQ24352 AAQ24353 AAQ24354 AAQ24356 AAQ24357 AAQ24358 AAQ24359 AAQ24361 AAQ24362 AAQ24363 AAQ24364 AAQ24365 A
AAL57301 *Sorghum bicolor* AAO43609 O-methyltransferase/caffeic acid O-methyltransferase
O82054 *Saccharum officinarum* CAA13175 AAQ67347 *Saccharum hybrid cultivar* COMT1_SACOF Caffeic acid 3-O-methyltransferase (S-adenosysl-L-methionine:caffeic acid 3-O-methyltransferase) (COMT) (CAOMT)/caffeic acid 3-O-Methyltransferase /caffeic acid 3-O
XP_480185 *Oryza sativa* (japonica cultivar-group) BAC99512 BAD14923 ABB90678 putative Caffeic acid 3-O-methyltransferase/putative Caffeic acid 3-O-methyltransferase /caffeic acid o-methyl transferase /O-methyltransferase
BAC54275 *Hordeum vulgare* O-methyltransferase
AAD10254 *Lolium perenne* caffeic acid O-methyltransferase; LPOMT2
AAP23942 *Triticum aestivum* caffeic acid O-methyltransferase
ABB03907 *Triticum aestivum* flavonoid O-methyltransferase
AAK68910 *Festuca arundinacea* caffeic acid O-methyltransferase
AAD10255 *Lolium perenne* caffeic acid O-methyltransferase; LPOMT3
AAK68907 *Festuca arundinacea* caffeic acid O-methyltransferase
AAD10253 *Lolium perenne* caffeic acid O-methyltransferase; LPOMT1
AAK68908 *Festuca arundinacea* AAK68909 caffeic acid O-methyltransferase/caffeic acid O-methyltransferase
AAC18623 *Lolium perenne* bispecific caffeic acid/5-hydroxyferulic acid O-methyltransferase
CAI30878 *Picea abies* caffeate O-methyltransferase
BAD83867 *Iris* x *hollandica* Caffeic acid O-methyltransferase
ABD32716 *Medicago truncatula* O-methyltransferase, family 2
BAC78826 *Rosa chinensis var. spontanea* eugenol O-methyltransferase
ABD32718 *Medicago truncatula* O-methyltransferase, family 2
AAL91506 *Nicotiana tabacum* caffeic acid O-methyltransferase II
CAA50561 *Nicotiana tabacum* catechol O-methyltransferase
AAS64572 *Vanilla planifolia* caffeic acid O-methyltransferase
P45986 *Mesembryanthemum crystallinum* S22696 AAA33032 AAB05891 IMT1_MESCR Inositol 4-methyltransferase/S22696 myo-inositol O-methyltransferase (EC 2.1.1.-) IMT1 - common ice plant /myo-inositol O-methyl transferase/inositol methyltransferase
BAD18975 *Rosa chinensis var. spontanea* phloroglucinol O-methyltransferase
AT1G33030 = NP_174579 AAF31281 AAL58927 AAW80884 O-methyltransferase/CDS /At1g33030/F9L11_18 /At1g33030
AAU20770 *Thalictrum flavum subsp. glaucum* (S)-scoulerine 9-O-methyltransferase; SOMT
Q39522 *Coptis japonica* BAA06192 SMT_COPJA (S)-scoulerine 9-O-methyltransferase/S-adenosyl-L-methionine:scoulerine 9-O-methyltransferase
ABD61227 *Vanilla planifolia* O-methyltransferase-2
ABD61228 *Vanilla planifolia* O-methyltransferase-3
BAA13683 *Glycyrrhiza echinata* O-methyltransferase
P93324 *Medicago sativa* 1FP1 AAB48059 CHOMT_MEDSA Isoliquiritigenin 2'-O-methyltransferase (Chalcone O-methyltransferase) (ChOMT)/D Chain D, Crystal Structure Analysis Of Chalcone O-Methyltransferase/isoliquiritigenin 2'-O-methyltransferase
Smo_COMT_2_1
Smo_COMT_10_1 Smo_COMT_5_1
Smo_COMT_31_1
CAB65279 *Medicago sativa subsp.* x *varia* O-diphenol-O-methyl transferase
XP_468466 *Oryza sativa* (japonica cultivar-group) BAD22923 BAD22855 putative O-diphenol-O-methyl transferase/putative O-diphenol-O-methyl transferase /putative O-diphenol-O-methyl transferase
AAP03058 *Limonium latifolium* S-adenosyl-L-methionine: beta-alanine N-methyltransferase
AT3G53140 = NP_190882 CAB64217 AAK56277 AAM91448 O-methyltransferase/caffeic acid O-methyltransferase-like protein /AT3g53140/T4D2_70 /AT3g53140/T4D2_70
Smo_COMT_38_1
Smo_COMT_9_1
Smo_COMT_22_1 Smo_COMT_37_2
Smo_COMT_32_1
Smo_COMT_23_1
Smo_COMT_27_1
Ppa_COMT_4_1
Smo_COMT_16_2
Smo_COMT_30_1
Smo_COMT_17_1
Smo_COMT_21_1
Smo_COMT_13_1 Smo_COMT720222067_1
Ppa_COMT_3_1
Ppa_COMT_1_1
Smo_COMT_19_1
Smo_COMT_11_1
Smo_COMT_8_1 Smo_COMT_33_1
Smo_COMT_24_1 Smo_COMT_3_1
Smo_COMT_6_1
Smo_COMT_29_1
AAR24095 *Ammi majus* caffeic acid O-methyltransferase-like protein
ABA96874 *Oryza sativa* (japonica cultivar-group) O-methyltransferase
ABA96674 *Oryza sativa* (japonica cultivar-group) O-methyltransferase, putative
AAA87043 *Hordeum vulgare subsp. vulgare* AAC18643 0-methyltransferase/caffeic acid O-methyltransferase
XP_474641 *Oryza sativa* (japonica cultivar-group) CAD39486 OSJNBa0039G19.11/OSJNBa0039G19.11
XP_470970 *Oryza sativa* (japonica cultivar-group) CAD39344 OSJNBa0094O15.13/OSJNBa0094O15.13
XP_474642 *Oryza sativa* (japonica cultivar-group) CAD39485 OSJNBa0039G19.12/OSJNBa0039G19.12
XP_474640 *Oryza sativa* (japonica cultivar-group) CAD39487 OSJNBa0039G19.10/OSJNBa0039G19.10
AT1G51990 = NP_974004 O-methyltransferase
AT1G51990 = NP_175611 AAD12674 O-methyltransferase/Strong similarity to gb|X74814 cafeic acid 3-O-methyl transferase from Eucalyptus gunnii.
AAQ01668 *Papaver somniferum* (R,S)-reticuline 7-O-methyltransferase
BAE79723 *Eschscholzia californica* reticuline-7-O-methyltransferase
BAC78828 *Rosa chinensis var. spontanea* caffeic acid O-methyltransferase
AAC49708 *Pinus taeda* caffeic acid O-methyltransferase
AAD24001 *Pinus radiata* caffeic acid ortho-methyltransferase
AAB09044 *Pinus radiata* O-methyltransferase
AAR09602 *Mentha* x *piperita* flavonoid 4'-O-methyltransferase
AAR09603 *Mentha* x *piperita* O-methyltransferase
ABA98340 *Oryza sativa* (japonica cultivar-group) o-methyltransferase zrp4
XP_481333 *Oryza sativa* (japonica cultivar-group) BAD01311 putative catechol O-methyltransferase/putative catechol O-methyltransferase
AAM97498 *Catharanthus roseus* O-methyltransferase
AAR02419 *Catharanthus roseus* AAR02420 flavonoid 4'-O-methyltransferase/flavonoid 4'-O-methyltransferase
AAR02421 *Catharanthus roseus* AAR02422 putative O-methyltransferase/putative O-methyltransferase
AAU20765 *Thalictrum flavum subsp. glaucum* (S)-norcoclaurine 6-O-methyltransferase; 6OMT
Q9LEL6 *Coptis japonica* BAB08004 6OMT_COPJA (RS)-norcoclaurine 6-O-methyltransferase (S-adenosyl-L-methionine:norcoclaurine 6-O-methyltransferase) (6-OMT)/S-adenosyl-L-methionine:norcoclaurine 6-O-methyltransferase
AAP45315 *Papaver somniferum* S-adenosyl-L-methionine:norcoclaurine 6-O-methyltransferase
AAQ01669 *Papaver somniferum* (R,S)-norcoclaurine 6-O-methyltransferase
AAP45313 *Papaver somniferum* S-adenosyl-L-methionine:3'-hydroxy-N-methylcoclaurine 4'-O-methyltransferase 1
AAP45314 *Papaver somniferum* S-adenosyl-L-methionine:3'-hydroxy-N-methylcoclaurine 4'-O-methyltransferase 2
AAU20768 *Thalictrum flavum subsp. glaucum* 3'-hydroxy-N-methyl-(S)-coclaurine 4'-O-methyltransferase; 4'OMT
Q9LEL5 *Coptis japonica* BAB08005 4OMT_COPJA 3'-hydroxy-N-methyl-(S)-coclaurine 4'-O-methyltransferase (S-adenosyl-L-methionine:3'-hydroxy-N-methylcoclaurine 4'-O-methyltransferase) (4'-OMT)/S-adenosyl-L-methionine:3'-hydroxy-N-methylcocla urine 4'-O-me

0.100