TYDC2 (AT4G28680): partial tree
File name: TYDC2.pt1.svg
297 aa residues 70 OTU included.
Partial tree including Smo_TyrDC_5_2, Smo_TyrDC_18_1 .
Assemble Job Id: dsv0Fl
Tree job id: DQM0BJ
BP values out of 100
Analyzed by tomoakin@kenroku.kanazawa-u.ac.jp   originally by N. Shinohara
Date: Sat Apr 21 12:07:31 JST 2007

75
96
100   AT4G28680 = NP_194597 Q9M0G4 CAB81456 carboxy-lyase/tyrosine decarboxylase /TYDC2_ARATH Probable tyrosine decarboxylase 2/aromatic amino-acid decarboxylase-like protein
CAB56038 *Arabidopsis thaliana* tyrosine decarboxylase
AT2G20340 = NP_849999 Q8RY79 AAD21754 AAL69507 AAM20115 carboxy-lyase/tyrosine decarboxylase /TYDC1_ARATH Tyrosine decarboxylase 1/putative tyrosine decarboxylase /putative tyrosine decarboxylase /putative tyrosine decarboxylase
69
XP_477817 *Oryza sativa* (japonica cultivar-group) BAC80122 BAD30830 putative tyrosine decarboxylase/putative tyrosine decarboxylase /putative tyrosine decarboxylase
48
100   Ppa_TyrDC_7_2
Ppa_TyrDC_14_1
88
69   Smo_TyrDC_31_3
100   Smo_TyrDC_38_2
Smo_TyrDC_32_2
91   100   Smo_TyrDC_5_2
Smo_TyrDC_202_2
100   54   Smo_TyrDC_18_1
Smo_TyrDC_9_1
76   Smo_TyrDC_13_1
76   Smo_TyrDC_35_2
83

97
100   XP_475687 *Oryza sativa* (japonica cultivar-group) AAT44136 putative tyrosine/DOPA decarboxylase /putative tyrosine/DOPA decarboxylase
100   NP_921158 *Oryza sativa* (japonica cultivar-group) AAM01094 AAM74316 AAP53445 putative Tyrosine/DOPA decarboxylase 2 /Putative tyrosine/DOPA decarboxylase /Putative Tyrosine/DOPA decarboxylase /Pyridoxal-dependent decarboxylase conserved domain, putati
83   100   BAD35168 *Oryza sativa* (japonica cultivar-group) tryptophan decarboxylase   /cultivar="Sekiguchi-asahi"   Os01g0770200
NP_916300 *Oryza sativa* (japonica cultivar-group) BAB56067 putative tyrosine/DOPA decarboxylase /putative tyrosine/dopa decarboxylase
NP_921362 *Oryza sativa* (japonica cultivar-group) AAK50420 ABB47543 putative tyrosine/dopa decarboxylase /Putative tyrosine/dopa decarboxylase /hypothetical protein LOC_Os10g26110
52   98   100   XP_480022 *Oryza sativa* (japonica cultivar-group) BAD11583 BAD13170 putative Aromatic-L-amino-acid decarboxylase/putative Aromatic-L-amino-acid decarboxylase /putative Aromatic-L-amino-acid decarboxylase
58   XP_480020 *Oryza sativa* (japonica cultivar-group) BAD11581 putative Aromatic-L-amino-acid decarboxylase/putative Aromatic-L-amino-acid decarboxylase
100   BAD11768 *Hordeum vulgare subsp. spontaneum* tryptophan decarboxylase
BAD11769 *Hordeum vulgare* tryptophan decarboxylase
98   P17770 *Catharanthus roseus* DCJAAP CAA47898 AAA33109 DDC_CATRO Aromatic-L-amino-acid decarboxylase (AADC) (DOPA decarboxylase) (Tryptophan decarboxylase)/DCJAAP aromatic-L-amino-acid decarboxylase (EC 4.1.1.28) - Madagascar periwinkle /tryptophan decar
76   BAC41515 *Ophiorrhiza pumila* tryptophan decarboxylase
100   AAB39708 *Camptotheca acuminata* tryptophan decarboxylase
AAB39709 *Camptotheca acuminata* tryptophan decarboxylase
99   100   Q06086 *Petroselinum crispum* AAA33860 TYDC2_PETCR Tyrosine decarboxylase 2/tyrosine decarboxylase
Q06088 *Petroselinum crispum* Q06087 AAA33861 AAA33862 AAA33863 TYDC4_PETCR Tyrosine decarboxylase 4/TYDC3_PETCR Tyrosine decarboxylase 3/tyrosine decarboxylase/tyrosine decarboxylase /tyrosine decarboxylase
100   100   P54771 *Papaver somniferum* AAA97535 TYDC5_PAPSO Tyrosine/DOPA decarboxylase 5 /tyrosine decarboxylase
87   100   P54768 *Papaver somniferum* AAA62346 TYDC1_PAPSO Tyrosine/DOPA decarboxylase 1 /tyrosine/dopa decarboxylase
AAC61844 *Papaver somniferum* tyrosine/dopa decarboxylase
AAC61842 *Papaver somniferum* tyrosine/dopa decarboxylase
100   P54770 *Papaver somniferum* AAC61840 TYDC3_PAPSO Tyrosine/DOPA decarboxylase 3 /tyrosine/dopa decarboxylase
47   69   AAC61843 *Papaver somniferum* tyrosine/dopa decarboxylase
P54769 *Papaver somniferum* AAA62347 TYDC2_PAPSO Tyrosine/DOPA decarboxylase 2 /tyrosine/dopa decarboxylase
AAG60665 *Thalictrum flavum subsp. glaucum* tyrosine/dopa decarboxylase
54   NP_776332 *Bos taurus* P27718 1709326A AAC41615 dopa decarboxylase/DDC_BOVIN Aromatic-L-amino-acid decarboxylase (AADC) (DOPA decarboxylase) (DDC) /1709326A aromatic AA decarboxylase/aromatic-L-amino acid decarboxylase
47   NP_999019 *Sus scrofa* 1JS3 P80041 S17848 *Sus scrofa domestica* 1JS6 *Sus scrofa* 1JS6 /1JS3 AAB20199 AAB47157 dopa decarboxylase/B Chain B, Crystal Structure Of Dopa Decarboxylase In Complex With The Inhibitor Carbidopa /DDC_PIG Aromatic-L-amino-acid
78   70   XP_855662 *Canis familiaris* PREDICTED: similar to Aromatic-L-amino-acid decarboxylase (AADC) (DOPA decarboxylase) (DDC) isoform 3
59   100   XP_855634 *Canis familiaris* PREDICTED: similar to Aromatic-L-amino-acid decarboxylase (AADC) (DOPA decarboxylase) (DDC) isoform 2
XP_855692 *Canis familiaris* PREDICTED: similar to Aromatic-L-amino-acid decarboxylase (AADC) (DOPA decarboxylase) (DDC) isoform 4
XP_848285 *Canis familiaris* PREDICTED: similar to Aromatic-L-amino-acid decarboxylase (AADC) (DOPA decarboxylase) (DDC) isoform 1
100   AAS01995 *Homo sapiens* unknown
100   NP_000781 *Homo sapiens* P20711 AAA58437 AAA20894 AAD40482 AAH00485 AAH08366 AAP35655 AAP36408 *synthetic construct* AAS00092 *Homo sapiens* CAG33005 EAL23898 AAX29200 *synthetic construct* AAX29201 AAX32606 AAX32607 dopa decarboxylase (aromatic L-amin
100   NP_036677 *Rattus norvegicus* P14173 AAA41087 AAA40646 AAH87032 dopa decarboxylase/DDC_RAT Aromatic-L-amino-acid decarboxylase (AADC) (DOPA decarboxylase) (DDC) /dopa decarboxylase (EC 4.1.1.28) /aromatic L-amino acid decarboxylase/Dopa decarboxylase
NP_057881 *Mus musculus* O88533 AAC25566 CAI25377 CAI23994 BAE28750 dopa decarboxylase/DDC_MOUSE Aromatic-L-amino-acid decarboxylase (AADC) (DOPA decarboxylase) (DDC) /aromatic-L-amino-acid decarboxylase /dopa decarboxylase /dopa decarboxylase /unnamed
100   P22781 *Cavia porcellus* AAA51530 DDC_CAVPO Aromatic-L-amino-acid decarboxylase (AADC) (DOPA decarboxylase) (DDC)/aromatic-L-amino acid decarboxylase
40   62   NP_001011289 *Xenopus tropicalis* AAH88004 hypothetical protein LOC496742/Hypothetical protein LOC496742
47   XP_419032 *Gallus gallus* PREDICTED: similar to Aromatic-L-amino-acid decarboxylase (AADC) (DOPA decarboxylase) (DDC)
NP_998507 *Danio rerio* AAH56292 AAH68188 dopa decarboxylase/Dopa decarboxylase /Ddc protein
CAJ38793 *Platynereis dumerilii* dopa decarboxylase protein
99   XP_394423 *Apis mellifera* PREDICTED: similar to CG30446-PA
100   100   NP_724489 *Drosophila melanogaster* AAM70812 Tdc2 CG30446-PA/CG30446-PA
EAL24715 *Drosophila pseudoobscura* GA15851-PA
100   NP_495744 *Caenorhabditis elegans* NP_495743 CAA88862 CAC42319 Tyrosin DeCarboxylase family member (tdc-1)/Tyrosin DeCarboxylase family member (tdc-1) /Hypothetical protein K01C8.3a /Hypothetical protein K01C8.3b
CAE57674 *Caenorhabditis briggsae* Hypothetical protein CBG00668
42   P48861 *Manduca sexta* AAC46604 DDC_MANSE Aromatic-L-amino-acid decarboxylase (AADC) (DOPA decarboxylase) (DDC)/dopa decarboxylase
52   84   XP_319840 *Anopheles gambiae str. PEST* EAA43375 ENSANGP00000023991/ENSANGP00000023991
100   AAC31639 *Aedes aegypti* dopa decarboxylase
95   AAT75222 *Armigeres subalbatus* dopa decarboxylase
EAL29377 *Drosophila pseudoobscura* GA10503-PA
100   100   AAO16853 *Drosophila melanogaster* AAO16854 dopa decarboxylase 56.7 kDa isoform/dopa decarboxylase 56.2 kDa isoform
70   AAO16857 *Drosophila melanogaster* AAO16858 dopa decarboxylase 56.7 kDa isoform/dopa decarboxylase 56.2 kDa isoform
100   NP_724163 *Drosophila melanogaster* NP_523600 NP_724164 P05031 CAA28022 CAA28023 AAF53762 AAF53763 CAB37087 CAB37088 AAL28256 AAF53764 AAO16831 AAO16832 AAO16833 AAO16834 AAO16835 AAO16836 AAO16837 AAO16838 AAO16839 AAO16840 AAO16841 AAO16842 AAO16843 A
O96567 *Drosophila simulans* AAO16859 AAO16860 DDC_DROSI Aromatic-L-amino-acid decarboxylase (AADC) (DOPA decarboxylase) (DDC)/dopa decarboxylase 56.7 kDa isoform /dopa decarboxylase 56.2 kDa isoform
XP_394115 *Apis mellifera* PREDICTED: similar to ENSANGP00000023991
100   XP_798399 *Strongylocentrotus purpuratus* PREDICTED: similar to dopa decarboxylase
2721_Cre

0.100