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ATGAGCTGTCCCGTGAGATCAAAA GATGCCGCACAAGATGGGGAACAGCTTGGAGAGGAAGCAGGTATGC 70
M S C P V R S K D A A Q D G E Q L G E E A G M
TCTATGGTGAGTACTTGATGTTGGATAAAAGTTTTGGGCGCCCAAAGACTATTGAGCCAGCAGAATAATCA 140
L Y G E Y L M L D K V L G A Q R L L S Q Q N N Q
ACCGGTGCACGATGAGCATTTATTTATTGTTACACATCAAGCGTACGAATTGTGGTTCAAACAAATTATT 210
P V H D E H L F I V T H Q A Y E L W F K Q I I
TATGAGTTGGATTCCGATTAGAGACGTTTTTCAGTGAAGTACTGGAGGAATCTCAAACACTTGAAATTTTAA 280
Y E L D S I R D V F S E V L E E S Q T L E I L
AGAGGCTGAACAGAAATCGTTCTCATTCTGAAGGTTCTGGTAGATCAAGTGATGATTTTAGAAAACCATGAC 350
K R L N R I V L I L K V L V D Q V M I L E T M T
ACCATTAGACTTTTATGGAGTTTAGAACTATCTACGACCGGCTTCTGGATTCCAAAGTCTTCAATTCAGA 420
P L D F M E F R N Y L R P A S G F Q S L Q F R
CTCGTTGAGAACAACCTTGGCGTCCGACAAGAAAATAGAGTGAAGTACAATAAGAATTATACAAAAGTCT 490
L L E N K L G V R Q E N R V K Y N K N Y T K V
TTGGAAATAATGAGGATGCCACCAAGCAAATAGAGGAATCCGAGGCGGAACCTTCTCTAACAGACTTAGT 560
F G N N E D A T K Q I E E S E A E P S L T D L V
TCAGCGATGGTTGGAGAGGACACCAGGATTGGAACCTAGAAGGGTTCAATTTTGGGGGAAATACCAACGA 630
Q R W L E R T P G L E L E G F N F W G K Y Q R
GCAGTTGAAGTTTTATTAGAAGAACAAGAATTCTAGCTGACGACGAAAAGACGGAGAGCATTAGGCAGT 700
A V E V L L E E Q R I L A D D E K T E S I R Q
ATCGGCTTACCGATATTGAGAAGAGAAGAGAAGTCTATGAGTCCATATTCAACCCGAAATACATCGAGC 770
Y R L T D I E K R R E V Y E S I F N P E I H R A
TTTAATAACAAGAGGAGAGAGGAGATTTCCCATAGGCTTTACAAGGTGCCATCATGATTACTTTCTAC 840
L I T R G E R R F S H K A L Q G A I M I T F Y
AGGGATGAACCACGATTTAGCCAACCTCATCAATCCTTACTCTTCTGATGGACATAGACTCTCTTATAA 910
R D E P R F S Q P H Q I L T L L M D I D S L I
CAAAATGGAGATACAATCATGTTCTTATGGTACAAAGGATGATAGGGTCATCACAACCTGGGAACAGGAGG 980
T K W R Y N H V L M V Q R M I G S S Q L G T G G
ATCTTCAGGATATCAATATTTAAGGTCAACTTTGAGTGATCGGTACAAGGTATTTCGTAGACCTTTTCAAC 1050
S S G Y Q Y L R S T L S D R Y K V F V D L F N
TTATCTACTTTCTTAATACCACGGGCTTACATACCTCCGCTCACCTCCGCCATGAGAAGCCATCTGTGTC 1120
L S T F L I P R A Y I P P L T S A M R S H L C
TTTGGGGAACGAAAAAATCTGCATTCAAAAACAGCAAACGGTGAAAATGGAAAAGTGGTGAAAATGG 1190
L W G N E K N L H S K T A N G E N G K V V E N G
ACAAGTAGTAGAAAACGGAATAGTGCTAGAAAATGGTAAACATGAATATGTGGATTCATTGTAA
Q V V E N G I V L E N G K H E Y V D S L *

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Figure S1. Nucleotide and protein sequences for *M. alternatus* *TDO*. Nucleic acids translation initiation start from the methionine in the open reading frame. The highly conserved region, Trp_dioxygenase, is highlighted. The asterisk indicates translation stop codons.