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Product datasheet for SC116613

TDO2 (NM_005651) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TDO2 (NM_005651) Human Untagged Clone
Tag:	Tag Free
Symbol:	TDO2
Synonyms:	HYPTRP; TDO; TO; TPH2; TRPO
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC116613 sequence for NM_005651 edited (data generated by NextGen Sequencing)

ATGAGTGGGTGCCCATTTTTAGGAAACAACTTTGGATATACTTTTAAAAAACTCCCCGTA
GAAGGCAGCGAAGAAGACAAATCACAAACTGGTGTGAATAGAGCCAGCAAAGGAGGTCTT
ATCTATGGGAACTACCTGCATTTGGAAAAAGTTTTGAATGCACAAGAACTGCAAAGTGAA
ACAAAAGGAAATAAAATCCATGATGAACATCTTTTTATCATAACTCATCAAGCTTATGAA
CTCTGGTTTAAGCAAATCCTCTGGGAGTTGGATTCTGTTCGAGAGATCTTTCAGAATGGC
CATGTCAGAGATGAAAGGAACATGCTTAAGGTTGTTTCTCGGATGCACCGAGTGTCAGTG
ATCCTGAAACTGCTGGTGCAGCAGTTTTCCATTCTGGAGACGATGACAGCCTTGGACTTC
AATGACTTCAGAGAGTACTTATCTCCAGCATCAGGCTTCCAGAGTTTGCAATTCCGACTA
TTAGAAAACAAGATAGGTGTTCTTCAGAACATGAGAGTCCCTTATAACAGAAGACATTAT
CGTGATAACTTCAAAGGAGAAGAAAATGAACTGCTACTTAAATCTGAGCAGGAAAAGACA
CTTCTGGAATTAGTGGAGGCATGGCTGGAAAGAACTCCAGGTTTAGAGCCACATGGATTT
AACTTCTGGGGAAAGCTTGAAAAAAATATCACCAGAGGCCTGGAAGAGGAATTCATAAGG
ATTCAGGCTAAAGAAGAGTCTGAAGAAAAAGAGGAACAGGTGGCTGAATTTCAGAAGCAA
AAAGAGGTGCTACTGTCCTTATTTGATGAGAAACGTCATGAACATCTCCTTAGTAAAGGT
GAAAGACGGCTGTCATACAGAGCACTTCAGGGAGCATTGATGATATATTTTTACAGGGAA
GAGCCTAGGTTCCAGGTGCCTTTTCAGTTGCTGACTTCTCTTATGGACATAGATTCACTG
ATGACCAAATGGAGATATAACCATGTGTGCATGGTGCACAGAATGCTGGGCAGCAAAGCT
GGCACCGGTGGTTCCTCAGGCTATCACTACCTGCGATCAACTGTGAGTGATAGGTACAAG
GTATTTGTAGATTTATTTAATCTTTCAACATACCTGATTCCCCGACACTGGATACCGAAG
ATGAACCCAACCATTCACAAATTTCTATATACAGCAGAATACTGTGATAGCTCCTACTTC
AGCAGTGATGAATCAGATTAA

Clone variation with respect to NM_005651.2

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_005651 unedited
NGGGCGTGTCAGAATTTGTATACGACTCATATAGGCGGCCGCGAAATTCGCACGAGCCTA
GAGTCAAACCTCCGTGCTTCTCAGACGTGCCTTTTCACCATGAGTGGGTGCCCATTTTTA
GGAAACAACTTTGGATATACTTTTAAAAAACTCCCCGTAGAAGGCAGCGAAGAAGACAAA
TCACAAACTGGTGTGAATAGAGCCAGCAAAGGAGGTCTTATCTATGGGAACTACCTGCAT
TTGGAAAAAGTTTTGAATGCACAAGAACTGCAAAGTGAAACAAAAGGAAATAAAATCCAT
GATGAACATCTTTTTATCATAACTCATCAAGCTTATGAACTCTGGTTTAAGCAAATCCTC
TGGGAGTTGGATTCTGTTCGAGAGATCTTTCAGAATGGCCATGTCAGAGATGAAAGGAAC
ATGCTTAAGGTTGTTTCTCGGATGCACCGAGTGTCAGTGATCCTGAAACTGCTGGTGCAG
CAGTTTTCCATTCTGGAGACGATGACAGCCTTGGACTTCAATGACTTCAGAGAGTACTTA
TCTCCAGCATCAGGCTTCCAGAGTTTGCAATTCCGACTATTAGAAAACAAGAATAGGTGT
TCTTCAGAACATGAGAGTCCCTTATAACAGAAGACATTATCGTGATAACTTCAAAGGAGA
AGAAAATGAACTGCTACTTAAATCTGAGCANGAAAAGACACTTCTGGAATTAGTGGANGC
ATGGCTGGAAAGAACTNCAGGTTTAGAGCCCATGGATTTAACTTCTGGGGAAAGCTTGAA
AAAATATCACCAGAGGCCTGNAAAGAGAANTCATTAGGATTCANNGCTAAGAAGAGTCTG
AAGAAAAGAGNAACAANGTGGNCTGATTTCAGAGCAANAAGAAGTGCTACTNGTCT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_005651 unedited
NCCCACGTTGAAGCGCGGTCCGCATGCTAGGTACAAGCCTGGGGTAGGGTCACATGGTAG
GGGCGCAAGAATTCAGACTTGAATATTTTAAAAATTTGTTCGAAAGCCTTAGTCCAGAAT
AATATAATGTACTGCATAAAAATTTGAAATAAATGAAGTTTACAAGTTTATAAAGATGAA
ACAATGAGATAGTGATTACATTAAGTGGTTACGTTAAGTCTCAGGGGAAACTGAATTTTT
AATAGGAAAACACCCTATGTACAATGTTACTATTTAAATGTATTCTTTCTACATCTAAAT
GCTAAGTCTTGCCGCAAACAAAAGGTAATCAAATTGTTTCTAGAATGTAAATCATAGCAT
CGTGGTGCTGAACAATATATGCATACATATTTTCAAACTGTATTTATGAAAATCCTTAGA
AAATAAAAAATAGGCTGTGAAACCAGGCTTCTTCCATAGATTTTGCAGACGATTTTAATC
GGATTCATCACTGCTGAAGTAGGAGCTATCACAGTCTTCAGCTGCATATAGAAATTAGAG
AATGGCTGGGTTCATCTTCGGTATCCAGTGTCGGGGAATCAGGTCTGTTGAAAGATTAAG
TCAGTCTACAGATACCTTGTACCGATCACTCACAGTTGATCGCAGGTAGTGATAGCCTGC
AGGACCACCGGAGCCATCTTTGCTGCCCCGCATTCTGTGCACCATGCACACATGGTTATA
TCTCCTTTGATCACCAGGAAAACCAGTGCCTCAGATAATCCGCCCCTGAAAAGGCGCCTG
AAACCTAGGCTGTTTCCTGGTAAAATGGTTCATTCATGCATCCTGGACTGCTCAGAATGA
CAGCCCTTCTTTACCCTTCCTAAAGAAAAGGTCATGACGTTACAAAACAAAAAAGGGACC
TGCCGC

Restriction Sites: NotI-NotI

ACCN: NM_005651

Insert Size: 1750 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_005651.1, NP_005642.1
RefSeq Size:	1712 bp
RefSeq ORF:	1221 bp
Locus ID:	6999
UniProt ID:	P48775
Cytogenetics:	4q32.1
Domains:	Trp_dioxygenase
Protein Pathways:	Metabolic pathways, Tryptophan metabolism
Gene Summary:	This gene encodes a heme enzyme that plays a critical role in tryptophan metabolism by catalyzing the first and rate-limiting step of the kynurenine pathway. Increased activity of the encoded protein and subsequent kynurenine production may also play a role in cancer through the suppression of antitumor immune responses, and single nucleotide polymorphisms in this gene may be associated with autism. [provided by RefSeq, Feb 2012]