

# Recombinant Human TDO2 Protein, Myc/DDK-tagged, C13 and N15-labeled

**Cat. No.** TDO2-6516H    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <b>Product Overview</b> | TDO2 MS Standard C13 and N15-labeled recombinant protein (NP_005642) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.                                                                                                                                                                                                                                                                                                                                             |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Description</b>      | 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.                                                             |
| <b>Molecular Mass</b>   | 47.9 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>AA Sequence</b>      | MSGCPFLGNNFGYTFFKKLPVEGSEEDKSQTGVNRASKGGLIYGNYLHLEKVLNAQE<br>LQSETKGNKIHDEHLFIITHQAYELWFKQILWELDSVREIFQNGHVRDERNMLKVVS<br>MHRVSVILKLLVQQFSILETMTALDFNDFREYLSPASGFQSLQFRLLLENKIGVLQNM<br>VPYNRRHYRDNFKGEENELLLKSEQEKTLLLEVAWLERTPGLEPHGFNFWGKLEK<br>NITRGLEEEFIRIQAKEESEEEQVAEFQKQKEVLLSLFDEKRHEHLLSKGERRLSY<br>RALQGALMIYFYREEPRFQVPFQLTSLMDIDSLMTKWRYNHVCMVHRMLGSKAGT<br>GGSSGYHYLRSTVSDRYKVFVDLFNLSTYLIPRHWIPKMNPTIHKFLYTAEYCDSSYF<br>SSDES DTRTRPLEQKLISEEDLAANDILDYKDDDDKV |

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|-----------------------|--------------------------------------------------------------------------------------------|
| <b>Purity</b>         | > 80% as determined by SDS-PAGE and Coomassie blue staining                                |
| <b>Stability</b>      | Stable for 3 months from receipt of products under proper storage and handling conditions. |
| <b>Storage</b>        | Store at -80 centigrade. Avoid repeated freeze-thaw cycles.                                |
| <b>Concentration</b>  | 50 µg/mL as determined by BCA                                                              |
| <b>Storage Buffer</b> | 100 mM glycine, 25 mM Tris-HCl, pH 7.3.                                                    |

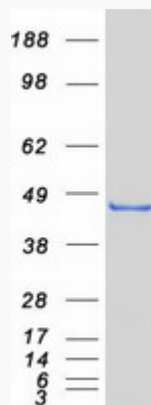
## GENE INFORMATION

|                        |                                                                                                                                              |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | TDO2 tryptophan 2,3-dioxygenase [ Homo sapiens (human) ]                                                                                     |
| <b>Official Symbol</b> | TDO2                                                                                                                                         |
| <b>Synonyms</b>        | TDO2; tryptophan 2,3-dioxygenase; TDO; TPH2; tryptophanase; tryptophan oxygenase; tryptophan pyrrolase; tryptamin 2,3-dioxygenase; TO; TRPO; |
| <b>Gene ID</b>         | 6999                                                                                                                                         |
| <b>mRNA Refseq</b>     | NM_005651                                                                                                                                    |
| <b>Protein Refseq</b>  | NP_005642                                                                                                                                    |
| <b>MIM</b>             | 191070                                                                                                                                       |
| <b>UniProt ID</b>      | P48775                                                                                                                                       |

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**SDS-PAGE**

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