

## Recombinant Human TDO2 protein, His-tagged

**Cat. No.** TDO2-724H    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human TDO2(2-406 aa) fused with His tag at N-terminal was expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	2-406 a.a.
<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>Form</b>	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 0.04% Tween 20, 20% glycerol, 440 mM Imidazole
<b>Molecular Mass</b>	49 kDa
<b>Purity</b>	>92%
<b>Applications</b>	Useful for studying enzyme kinetics, substrate specificity, and screening inhibitors.
<b>Storage</b>	At least 6 months at –80 centigrade. Avoid freeze/thaw cycles. Storing diluted

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enzyme is not recommended, if necessary, use carrier protein (BSA 0.1 – 0.5%).

**Concentration** 0.65 mg/ml

## GENE INFORMATION

**Gene Name** [TDO2 tryptophan 2,3-dioxygenase \[ Homo sapiens \]](#)

**Official Symbol** [TDO2](#)

**Synonyms** TDO2; tryptophan 2,3-dioxygenase; TDO; TPH2; tryptophanase; tryptophan oxygenase; tryptophan pyrrolase; tryptamin 2,3-dioxygenase; TO; TRPO;

**Gene ID** [6999](#)

**mRNA Refseq** [NM\\_005651](#)

**Protein Refseq** [NP\\_005642](#)

**MIM** [191070](#)

**UniProt ID** [P48775](#)

**Chromosome Location** 4q31-q32

**Pathway** Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of amino acids and derivatives, organism-specific biosystem; Monoamine Transport, organism-specific biosystem; NAD biosynthesis II (from tryptophan), organism-specific biosystem; NAD biosynthesis II (from tryptophan), conserved biosystem; Tryptophan catabolism, organism-specific biosystem;

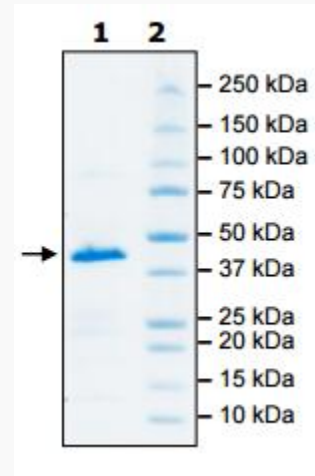
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**Function**

amino acid binding; heme binding; metal ion binding; oxidoreductase activity; oxygen binding; tryptophan 2,3-dioxygenase activity;



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