

Recombinant Human TDO2 protein, His-tagged

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

SPECIFICATION

Product Overview	Recombinant Human TDO2(2-406 aa) fused with His tag at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	2-406 a.a.
Description	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.
Form	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 0.04% Tween 20, 20% glycerol, 440 mM Imidazole
Molecular Mass	49 kDa
Purity	>92%
Applications	Useful for studying enzyme kinetics, substrate specificity, and screening inhibitors.
Storage	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;

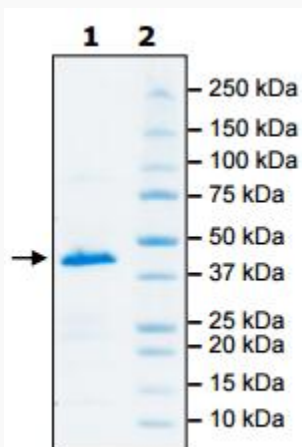
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Function

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



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