

Recombinant Human IDO1, GST-tagged

Cat. No. IDO1-14054H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IDO1 protein, fused to GST-tag, was expressed in E.coli and purified by GSH-sepharose.
Species	Human
Source	E.coli
ProteinLength	1-403a.a.
Description	This gene encodes indoleamine 2,3-dioxygenase (IDO) - a heme enzyme that catalyzes the first and rate-limiting step in tryptophan catabolism to N-formyl-kynurenine. This enzyme acts on multiple tryptophan substrates including D-tryptophan, L-tryptophan, 5-hydroxy-tryptophan, tryptamine, and serotonin. This enzyme is thought to play a role in a variety of pathophysiological processes such as antimicrobial and antitumor defense, neuropathology, immunoregulation, and antioxidant activity. Through its expression in dendritic cells, monocytes, and macrophages this enzyme modulates T-cell behavior by its peri-cellular catabolization of the essential amino acid tryptophan.
Storage	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
Storage Buffer	1M PBS (58mM Na ₂ HPO ₄ , 17mM NaH ₂ PO ₄ , 68mM NaCl, pH8.) added with 100mM GSH and 1% Triton X-100, 15% glycerol.

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GENE INFORMATION

Gene Name	IDO1 indoleamine 2,3-dioxygenase 1 [Homo sapiens]
Official Symbol	IDO1
Synonyms	IDO1; indoleamine 2,3-dioxygenase 1; IDO, INDO, indoleamine pyrrole 2,3 dioxygenase; indole 2,3-dioxygenase; indolamine 2,3 dioxygenase; indoleamine-pyrrole 2,3-dioxygenase; IDO; INDO; IDO-1;
Gene ID	3620
mRNA Refseq	NM_002164
Protein Refseq	NP_002155
MIM	147435
UniProt ID	P14902
Chromosome Location	8p12-p11
Pathway	African trypanosomiasis, organism-specific biosystem; African trypanosomiasis, conserved biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of amino acids and derivatives, organism-specific biosystem; Tryptophan catabolism, organism-specific biosystem; Tryptophan metabolism, organism-specific biosystem;
Function	electron carrier activity; heme binding; indoleamine 2,3-dioxygenase activity; metal ion binding; oxidoreductase activity; tryptophan 2,3-dioxygenase activity;

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