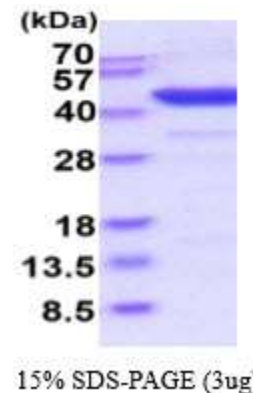


IDO1, human recombinant

CATALOG NO:	P1096-10 10 µg P1096-50 50 µg
ALTERNATE NAMES:	Indoleamine 2,3-dioxygenase 1, IDO, IDO-1, INDO
CONCENTRATION:	0.5 mg/ml (determined by Bradford assay)
SOURCE:	<i>E.coli</i> expressed recombinant IDO1 protein is fused to His-tag at N-terminus (1-403aa).
PURITY:	> 90% by SDS-PAGE
MOL. WEIGHT:	This protein is fused with 6x His tag at N terminus and the protein has a calculated MW of 47.7 kDa (426aa).
FORM:	Liquid
FORMULATION:	In 20mM Tris-HCl buffer (pH8.0) containing 0.15M NaCl, 20% glycerol, 1mM DTT
STORAGE CONDITIONS:	Store at +4°C for short term (1-2 weeks). For long term storage, aliquot and store at -70°C. Avoid repeated freeze/thaw cycles.
SEQUENCE:	MGSSHHHHHH SSGLVPRGSH MGSMAHAMEN SWTISKEYHI DEEVGFALPN PQENLPDFYN DWMFIAKHLP DLIESGQLRE RVEKLNMLSI DHLTDHKSQR LARLVLCIT MAYVWVGKGGH DVRKVLPRNI AVPYCQLSKK LELPPILVYA DCVLANWKKK DPNKPLTYEN MDVLFSDRDG DCSKGFLLVS LLVEIAAASA IKVIPTVFKA MQMQRDTLL KALLEIASCL EKALQVFHQI HDHVNPKAFF SVLRIYLSGW KGNPQLSDGL VYEGFWEDPK EFAGGSAGQS SVFQCFDVL GQQTAGGGH AAQFLQDMRR YMPPAHRNFL CSLESNPSVR EFVLSKGDAG LREAYDACVK ALVSLRSYHL QIVTKYLIP ASQPKENKT SEDPSKLEAK GTGGTDL MNF LKTVRSTTEK SLLKEG
DESCRIPTION:	IDO1 is an indoleamine 2,3-dioxygenase - 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, and serotonin. It 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 pericellular catabolization of the essential amino acid tryptophan. Recombinant human IDO1 protein, fused to His-tag at N-terminus, was expressed in <i>E.coli</i> and purified by using conventional chromatography techniques.
BIOLOGICAL ACTIVITY:	Specific activity is >300 pmol/min/ug, and is defined as the amount of enzyme that hydrolyze 1.0 pmole of L-Tryptophan to N-formyl-Lkynurenine per minute at pH 6.5 at 25C.



Human recombinant IDO1

RELATED PRODUCT:

- IMPAD1, human recombinant (**Cat. No. 7812-10**)
- CST6, human recombinant (**Cat. No. 9234-10**)
- Cathepsin B, Active, human recombinant (**Cat. No. 7580-50**)

FOR RESEARCH USE ONLY! Not to be used on humans.