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AR51531PU-N Human IDO1 / INDO (1-403, His-tag) - Purified

Alternate names: 3-dioxygenase, 3-dioxygenase, 3-dioxygenase 1, EC=1.13.11.52, IDO, IDO, IDO1, INDO, Indoleamine 2, Indoleamine 2, Indoleamine-pyrrole 2

Quantity: 0.5 mg

Concentration: 0.5 mg/ml (determined by Bradford assay)

Background: 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 peri-cellular catabolization of the essential amino acid tryptophan.

Uniprot ID: P14902

NCBI: NP_002155

GeneID: 3620

Species: Human

Source: E. coli

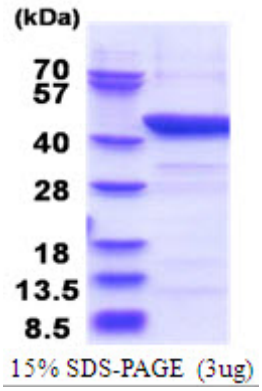
Format: **State:** Liquid purified protein
Purity: >90% by SDS - PAGE
Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 20% glycerol, 1mM DTT

Description: Recombinant human IDO1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
AA Sequence:
MGSSHHHHHH SSGLVPRGSH MGSMAHAMEN SWTISKEYHI DEEVGFALPN PQENLPDFYN
DWMFIAKHLP DLIESGQLRE RVEKLNMLSI DHLTDHKSQR LARLVLGCIT MAYVWGKGHG
DVRKVLPRNI AVPYCQLSKK LELPPILVYA DCVLANWKKK DPNKPLTYEN MDVLFSFRDG
DCSKGFFLVS LLVEIAAASA IKVIPTVFKA MQMQERDTLL KALLEIASCL EKALQVFHQI
HDHVNPKAFF SVLRIYLSGW KGNPQLSDGL VYEGFWEDPK EFAGGSAGQS SVFQCFDVLL
GIQQTAGGGH AAQFLQDMRR YMPPAHRNFL CSLESNPSVR EFVLSKGDAG LREAYDACVK
ALVSLRSYHL QIVTKYILIP ASQQPKENKT SEDPSKLEAK GTGGTDLMNF LKTVRSTTEK SLLKEG
Molecular weight: 47.7 kDa (426aa), confirmed by MALDI-TOF

Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: Metz R., et al (2007). Nature Cancer Res. 67:7082-7087 Yuasa H.J., et al (2007). J. Mol. Evol. 65:705-714

Pictures:



15% SDS-PAGE (3ug)