

32-6810: IDO1 Human, Active

Application : Functional Assay

Alternative Name : IDO, IDO-1, INDO, Indoleamine 2,3-dioxygenase 1, Indoleamine-pyrrole 2,3-dioxygenase.

Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

Indoleamine 2,3-Dioxygenase 1 (IDO1) catalyzes the primary and rate-limiting stage in tryptophan catabolism to N-formyl-kynurenine. IDO1 affects on various tryptophan substrates including D-tryptophan, and serotonin and is expressed in dendritic cells, monocytes, and macrophages. IDO1 takes part in a range of pathophysiological processes like neuropathology, antimicrobial and antitumor defense, immunoregulation, and antioxidant activity. IDO1 regulates T-cell behavior by its pericellular catabolization of the necessary amino acid tryptophan.

IDO1 Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 426 amino acids (1-403a.a) and having a molecular mass of 47.7kDa. IDO1 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 90% as determined by SDS-PAGE.

Content : The IDO1 solution (0.5mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.15M NaCl, 20% glycerol and 1mM DTT.

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Amino Acid : MGSSHHHHHH SSGLVPRGSH MGSMAMAHAMEN SWTISKEYHI DEEVGFALPN PQENLPDFYN
DWMFIAKHLP DLIESGQLRE RVEKLNMLSI DHLTDHKSQR LARLVLCIT MAYVWGKGHG DVRKVLPRNI
AVPYCQLSKK LELPPILVYA DCVLANWKKK DPNKPLTYEN MDVLFSEFRDG DCSKGFFLVS LLVEIAAASA
IKVIPTVFKA MQMQERDTLL KALLEIASCL EKALQVFHQI HDHVNPKAFF SVLRILSGW KGNPQLSDGL
VYEGFWEDPK EFAGGSAGQS SVFQCFDVLL GIQQTAGGGH AAQFLQDMRR YMPPAHRNFL
CSLESNPSVR EFVLSKGDAG LREAYDACVK ALVSLRSYHL QIVTKYILIP ASQPKENKT SEDPSKLEAK
GTGGTDLNMF LKTVRSTTEK SLLKEG.

Application Note

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.