
Product Data Sheet

Product Name: IDO1 Human, Active

Cat. No.: GP21824

Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	IDO; IDO-1; INDO; Indoleamine 2,3-dioxygenase 1; Indoleamine-pyrrole 2,3-dioxygenase.		
Amino Acid Sequence	MGSSHHHHHH SSGLVPRGSH MGSMAMAHAMEN SWTISKEYHI DEEVGFALPN PQENLPDFYN DWMFIAKHLP DLIESGQLRE RVEKLNMLSI DHLTDHKSQR LARLVLCIT MAYVWGKGHG DVRKVLPRNI AVPYCQLSKK LELPPILVYA DCVLANWKKK DPNKPLTYEN MDVLFSEFRDG DCSKGFLLVS LLVEIAAASA IKVIPTVFKA MQMQERDILL KALLEIASCL EKALQVFHQI HDHVNPKAFF SVLRIYLSGW KGNPQLSDGL VYEGFWEDPK EFAGGSAGQS SVFQCFDILL GIQQTAGGGH AAQFLQDMRR YMPPAHRNFL CSLESNPSVR EFVLSKGDAG LREAYDACVK ALVSLRSYHL QIVTKYILIP ASQQPKENKT SEDPSKLEAK GTGGTDL MNF LKTVRSTTEK SLLKEG.		
Formulation	The IDO1 solution (0.5mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.15M NaCl, 20% glycerol and 1mM DTT.		

Introduction

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.

Biological Activity

Specific activity is > 300 pmol/min/ug, and is defined as the amount of enzyme that

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

hydrolyze 1.0 pmole of L-Tryptophan to N-formyl-L-kynurenine per minute at pH 6.5 at 25°C.

Stability

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.

Background

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.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA