## **MCE** MedChemExpress

# Product Data Sheet

# Inhibitors • Screening Libraries • Proteins

### IDO Protein, Mouse (His)

Cat. No.:	HY-P72616
Synonyms:	Indoleamine 2,3-dioxygenase 1; IDO-1; Indoleamine-pyrrole 2,3-dioxygenase; IDO; INDO
Species:	Mouse
Source:	E. coli
Accession:	P28776 (M1-P407)
Gene ID:	15930
Molecular Weight:	40-50 kDa

### PROPERTIES

AA Sequence	MALSKISPTE	GSRRILEDHH	IDEDVGFALP	HPLVELPDAY		
	SPWVLVARNL	PVLIENGQLR	EEVEKLPTLS	T D G L R G H R L Q		
	RLAHLALGYI	TMAYVWNRGD	DDVRKVLPRN	IAVPYCELSE		
	KLGLPPILSY	ADCVLANWKK	К  Р  Р  Я	NMDILFSFPG		
	GDCDKGFFLV	SLLVEIAASP	ΑΙΚΑΙΡΤΥSS	AVERQDLKAL		
	EKALHDIATS	LEKAKEIFKR	MRDFVDPDTF	FHVLRIYLSG		
	WKCSSKLPEG	LLYEGVWDTP	K	SSIFQSLDVL		
	LGIKHEAGKE	SPAEFLQEMR	EYMPPAHRNF	LFFLESAPPV		
	REFVISRHNE	DLTKAYNECV	NGLVSVRKFH	LAIVDTYIMK		
	P S K K K P T D G D	KSEEPSNVES	RGTGGTNPMT	FLRSVKDTTE		
	KALLSWP					
Appearance	Solution					
Formulation	Supplied as a 0.2 $\mu m$ filtered solution of PBS, pH 7.4.					
Endotoxin Level	<1 EU/µg, determined by LAL method.					
Reconsititution	N/A					
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.					
Shipping	Shipping with dry ice					

# DESCRIPTION Background The IDO protein serves as a key catalyst in initiating and regulating the catabolism of the essential amino acid tryptophan along the kynurenine pathway. Its pivotal role extends beyond metabolism, encompassing active participation in peripheral

immune tolerance to maintain homeostasis by averting autoimmunity and immunopathology arising from unbridled immune responses. Notably, a shortage of tryptophan impedes T lymphocyte division, while the accumulation of tryptophan catabolites induces T-cell apoptosis and fosters the differentiation of regulatory T-cells. Additionally, IDO functions as a potent suppressor of anti-tumor immunity and plays a crucial role in limiting the growth of intracellular pathogens by depriving them of tryptophan. Furthermore, IDO is integral to safeguarding the fetus from maternal immune rejection, highlighting its diverse contributions to immune regulation and cellular equilibrium.

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

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA