

IDO1 / IDO recombinant protein

Recombinant Human IDO1 / IDO Protein

CATALOG #
AAA173508

HOST
E Coli

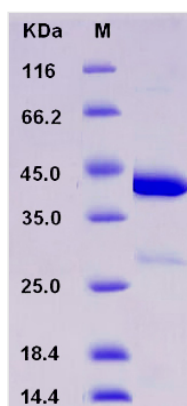
PRODUCT SYNONYMS

IDO1 / IDO; Recombinant Human IDO1 / IDO Protein; IDO; IDO-1; INDO; Indoleamine 2, 3-dioxygenase; IDO1 / IDO recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	> 91 % as determined by SDS-PAGE
Form/Format	Supplied as sterile 50 mM NaAC, 100 mM NaCl, 20 % glycerol, pH 5.5.
Sequence Length	403
Source	Human
Predicted N Terminal	Gly
Endotoxin	< 1.0 EU per ug of the protein as determined by the LAL method.
Stability	Samples are stable for up to twelve months from date of receipt at -70°C.
Molecular Mass	The recombinant human IDO1 consists of 403 amino acids and predicts a molecular mass of 45.2 KDa. It migrates as an approximately 46 KDa band in SDS-PAGE under reducing conditions.
Reconstitution	Calculated Concentration: 0.55mg/mL; Volume: 37uL. Concentration is measured by UV-Vis.
Preparation and Storage	Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted and be used as soon as possible. Avoid repeated freeze-thaw cycles.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for IDO1 / IDO recombinant protein	Background: Indoleamine 2, 3-dioxygenase-1, also known as Indoleamine-pyrrole 2, 3-dioxygenase, IDO1 and IDO, is a member of the indoleamine 2, 3-dioxygenase family. IDO1 / IDO and tryptophan 2, 3-dioxygenase (TDO) are tryptophan-degrading enzymes that catalyze the first step in tryptophan catabolism via the kynurenine pathway. TDO is widely distributed in both eukaryotes and bacteria. In contrast, IDO has been found only in mammals and yeast. In 2007, a third enzyme, indoleamine 2, 3-dioxygenase-2 (IDO2), was discovered. IDO2 is found not only in mammals but also in lower vertebrates. IDO1 / IDO is an immunosuppressive molecule inducible in various cells. IDO1 / IDO catalyzes the cleavage of the pyrrol ring of tryptophan and incorporates both atoms of a molecule of oxygen. It mediates oxidative cleavage of tryptophan, an amino acid essential for cell proliferation and survival. IDO1 / IDO inhibition is proposed to have therapeutic potential in immunodeficiency-associated abnormalities, including cancer. The IDO pathway is activated in multiple tumor type s. Selective inhibition of IDO1 may represent an attractive cancer therapeutic strategy via up-regulation of cellular immunity. IDO1 / IDO is an enzyme that suppresses adaptive T-cell immunity by catabolizing tryptophan from the cellular microenvironment. Inhibition of IDO pathway might enhance the efficacy of immunotherapeutic strategies for cancer. Description: A DNA sequence encoding the human IDO1 (NP_002155.1) (Ala2-Gly403) was expressed and purified with one additional amino acids (Gly) at the N-terminus.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4504577
NCBI GeneID	3620
NCBI Accession #	NP_002155.1
NCBI GenBank Nucleotide #	NM_002164.5
UniProt Accession #	P14902; Q540B4; E5RGR8; F6M9T7
NCBI Official Full Name	indoleamine 2,3-dioxygenase 1
NCBI Official Synonym Full Names	indoleamine 2,3-dioxygenase 1
NCBI Official Symbol	IDO1
NCBI Official Synonym Symbols	IDO; INDO; IDO-1
NCBI Protein Information	indoleamine 2,3-dioxygenase 1
UniProt Protein Name	Indoleamine 2,3-dioxygenase 1
UniProt Gene Name	IDO1
UniProt Synonym Gene Names	IDO; INDO; IDO-1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.