

Datasheet for ABIN7196174

**IDO1 Protein**[Go to Product page](#)**1** Image

## Overview

Quantity:	50 µg
Target:	IDO1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

## Product Details

Purpose:	Recombinant Human IDO1/IDO Protein (Active)
Sequence:	Ala2-Gly403
Characteristics:	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.
Purity:	> 85 % as determined by reducing SDS-PAGE.
Biological Activity Comment:	Measured by its ability to oxidize L-tryptophan to N-formylkynurenine. The specific activity is > 500 pmoles/min/µg.

## Target Details

Target:	IDO1
Alternative Name:	IDO1/IDO ( <a href="#">IDO1 Products</a> )
Background:	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

## Target Details

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 types. 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.

Immune Checkpoint Immune Checkpoint Detection: ELISA Antibodies Co-inhibitory Immune Checkpoint Targets Immunotherapy Cancer Immunotherapy Targeted Therapy

Synonym: Indole 2,3-dioxygenase; Indoleamine 2,3-dioxygenase 1; IDO-1; IDO1; IDO; INDO

Molecular Weight: 45.2 kDa

NCBI Accession: [NP\\_002155](#)

Pathways: [Activated T Cell Proliferation](#)

## Application Details

Restrictions: For Research Use only

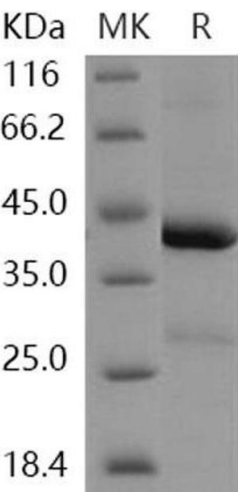
## Handling

Format: Frozen, Liquid

Buffer: Supplied as sterile 50 mM NaAC, 100 mM NaCl, 20 % glycerol, pH 5.5.

Storage: -20 °C

Storage Comment: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.



Western Blotting

Image 1.