

Recombinant Human IDO-1 Protein

Catalog No.: RP00023 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	3620	P14902

Tags

No tag

Synonyms

IDO; IDO-1;
INDO; IDO1; IDO-1; INDO; indoleamine 2

Product Information

Source	Purification
<i>E. coli</i>	> 97% by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of 50mM Tris, 150mM NaCl, pH 8.0. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

Background

Indoleamine 2,3-dioxygenase (IDO) is a heme enzyme that catalyzes the first and rate-limiting step in tryptophan catabolism to N-formyl-kynurenine. This enzyme acts on multiple tryptophan substrates including D-tryptophan, L-tryptophan, 5-hydroxy-tryptophan, tryptamine, and serotonin. This enzyme is thought to play a role in a variety of pathophysiological processes such as antimicrobial and antitumor defense, neuropathology, immunoregulation, and antioxidant activity. Through its expression in dendritic cells, monocytes, and macrophages this enzyme modulates T-cell behavior by its peri-cellular catabolization of the essential amino acid tryptophan.

Basic Information

Description

Recombinant Human IDO-1 Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Ala2-Gly403) of human IDO-1 (Accession #NP_002155.1).

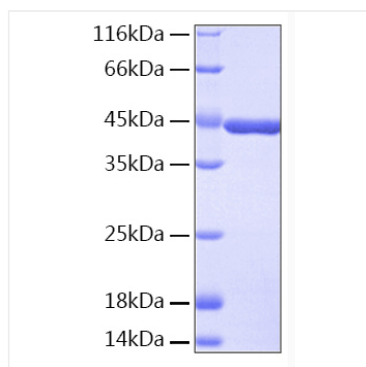
Bio-Activity

Storage

Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

Validation Data



Recombinant Human IDO-1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 43 kDa.