

Recombinant Human IDO1 Protein (Ala2-Gly403), N-6×His-tagged

Product Information

Cat	IMP-10664
Official Symbol	IDO1
Product Overview	Recombinant human IDO protein (Ala2-Gly403) with a 6×His tag at N-terminus was expressed in <i>E. coli</i> .
Description	<i>This gene encodes indoleamine 2,3-dioxygenase (IDO) - 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.</i>
Expression System	<i>E. coli</i>
Species	<i>Human</i>
Tag	<i>N-6×His</i>
Predicted N Terminal	<i>Met</i>
Form	<i>Supplied as a 0.2 µm filtered solution in Sodium Acetate, NaCl and Glycerol.</i>
Molecular Mass	<i>Predicted Molecular Mass: 46 kDa SDS-PAGE: 42 kDa, reducing conditions</i>
Protein length	<i>Ala2-Gly403</i>
Bio-activity	<i>Measured by its ability to oxidize L-tryptophan to N-formyl-kynurenine. The specific activity is >500 pmol/min/µg, as measured under the described conditions.</i>
Endotoxin	
Purity	<i>>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.</i>
Notes	<i>Monomer</i>
Storage	<i>Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 6 months from date of receipt, -70 centigrade as supplied. 3 months, -70 centigrade under sterile conditions after opening.</i>