

Product datasheet for **TA321445**

IDO1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:500-2000
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Fusion protein corresponding to C terminal 200 amino acids of human indoleamine 2,3-dioxygenase 1
Formulation:	PBS pH7.3, 0.05% NaN ₃ , 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	45 kDa
Gene Name:	indoleamine 2,3-dioxygenase 1
Database Link:	NP_002155 Entrez Gene 3620 Human P14902



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Background:

INDO/IDO1/indoleamine 2,3-dioxygenase (IDO) is an IFN- γ -inducible enzyme that catalyzes the rate-limiting step of tryptophan degradation. IDO is upregulated in many tumors and in dendritic cells in tumor-draining lymph nodes. Elevated tryptophan catabolism in these cells leads to tryptophan starvation of T cells, limiting T cell proliferation and activation. Therefore, IDO is considered an immunosuppressive molecule, and research studies have shown that upregulation of IDO is a mechanism of cancer immune evasion. The gastrointestinal stromal tumor drug, imatinib, was found to act, in part, by reducing IDO expression, resulting in increased CD8+ T cell activation and induction of apoptosis in regulatory T cells. In addition to its enzymatic activity, IDO was recently shown to have signaling capability through an immunoreceptor tyrosine-based inhibitory motif (ITIM) that is phosphorylated by Fyn in response to TGF- β . This leads to recruitment of SHP-1 and activation of the noncanonical NF- κ B pathway.

Synonyms:

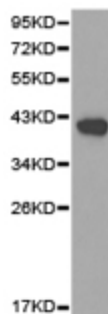
IDO; IDO-1; INDO

Protein Families:

Druggable Genome

Protein Pathways:

Metabolic pathways, Tryptophan metabolism

Product images:

Predicted band size: 45 kDa. Positive control: Placenta tissue lysate. Recommended dilution: 1/500-2000. (Gel: 10%SDS-PAGE Lysate: 40 ug Primary antibody: 1/500 dilution Secondary antibody: Goat anti Rabbit IgG - H&L (HRP) at 1/10000 dilution Exposure time: 1 minute)