10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Indoleamine 2,3-dioxygenase Rabbit mAb

Catalog # AP75616

Specification

Indoleamine 2,3-dioxygenase Rabbit mAb - Product Information

Application	**WB, IHC-P, IHC-F, IP, ICC**
Primary Accession	P14902
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Monoclonal Antibody**
Calculated MW	**45326**

Indoleamine 2,3-dioxygenase Rabbit mAb - Additional Information

Gene ID 3620

Other Names
IDO1

Dilution
WB~~1/500-1/1000
IHC-P~~N/A
IHC-F~~N/A
IP~~N/A
ICC~~N/A

Format
Liquid

Indoleamine 2,3-dioxygenase Rabbit mAb - Protein Information

Name IDO1 (HGNC:6059)

Synonyms IDO, INDO

Function
Catalyzes the first and rate limiting step of the catabolism of the essential amino acid tryptophan along the kynurenine pathway (PubMed:17671174). Involved in the peripheral immune tolerance, contributing to maintain homeostasis by preventing autoimmunity or immunopathology that would result from uncontrolled and overreacting immune responses (PubMed:25691885). Tryptophan shortage inhibits T lymphocytes division and accumulation of tryptophan catabolites induces T-cell apoptosis and differentiation of regulatory T-cells (PubMed:25691885). Acts as a suppressor of anti-tumor immunity (PubMed:14502282, PubMed:23103127, PubMed:<a href="http://www.uniprot.org/citations/25157255"

target="_blank">25157255, PubMed:25691885). Limits the growth of intracellular pathogens by depriving tryptophan (PubMed:25691885). Protects the fetus from maternal immune rejection (PubMed:25691885).

Cellular Location
Cytoplasm, cytosol {ECO:0000250|UniProtKB:P28776, ECO:0000303|PubMed:25691885}

Tissue Location
Expressed in mature dendritic cells located in lymphoid organs (including lymph nodes, spleen, tonsils, Peyers's patches, the gut lamina propria, and the thymic medulla), in some epithelial cells of the female genital tract, as well as in endothelial cells of term placenta and in lung parenchyma (PubMed:25691885). Weakly or not expressed in most normal tissues, but mostly inducible in most tissues (PubMed:25691885). Expressed in more than 50% of tumors, either by tumoral, stromal, or endothelial cells (expression in tumor is associated with a worse clinical outcome) (PubMed:18418598). Not overexpressed in tumor-draining lymph nodes (PubMed:25691885, PubMed:26155395).

Indoleamine 2,3-dioxygenase Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Indoleamine 2,3-dioxygenase Rabbit mAb - Images