

Indoleamine 2,3-dioxygenase Rabbit mAb

Catalog # AP75616

Product Information

Application WB, IHC-P, IHC-F, IP, ICC

Primary Accession P14902
Reactivity Human
Rabbit

Clonality Monoclonal Antibody

Calculated MW 45326

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 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

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:<u>17671174</u>). 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: <u>25691885</u>). Acts as a suppressor

of anti-tumor immunity (PubMed: 14502282, PubMed: 23103127,

PubMed:<u>25157255</u>, PubMed:<u>25691885</u>). Limits the growth of intracellular pathogens by depriving tryptophan (PubMed:<u>25691885</u>). Protects the fetus

from maternal immune rejection (PubMed: 25691885).

Cellular Location Cytoplasm, cytosol {ECO:0000250|UniProtKB:P28776,

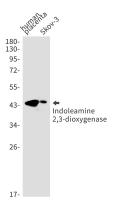
ECO:0000303 | PubMed:25691885}

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).

Images



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