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

Anti-IDO1 / IDO Antibody (clone ID 177)

Mouse Anti Human Monoclonal Antibody
Catalog # ALS18493

Product Information

Application	WB, IHC-P, E
Primary Accession	P14902
Predicted	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,k
Clone Names	ID 177
Calculated MW	45326
Concentration (mg/ml)	1 mg/ml

Additional Information

Gene ID	3620
Alias Symbol	IDO1
Other Names	IDO1, IDO, Indole 2, 3-dioxygenase, Indolamine 2, 3 dioxygenase, IDO-1, INDO, Indoleamine 2, 3-dioxygenase, Indoleamine 2, 3-dioxygenase 1
Target/Specificity	Recognizes human IDO. Detects a band of ~45kDa by Western blot. Other species not tested.
Reconstitution & Storage	Protein G purified
Precautions	Anti-IDO1 / IDO Antibody (clone ID 177) is for research use only and not for use in diagnostic or therapeutic procedures.

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, PubMed:18026683). 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: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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.