

Anti-IDO1 / IDO Antibody (clone ID 177)

Mouse Anti Human Monoclonal Antibody Catalog # ALS18493

### Specification

# Anti-IDO1 / IDO Antibody (clone ID 177) - Product Information

Application Primary Accession Predicted Host Clonality Isotype Calculated MW WB, IHC-P, E P14902 Human Mouse Monoclonal IgG1,k 45326

### Anti-IDO1 / IDO Antibody (clone ID 177) - 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.

# Anti-IDO1 / IDO Antibody (clone ID 177) - 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:<a href="http://www.uniprot.org/citations/17671174" target="\_blank">17671174</a>). 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:<a

href="http://www.uniprot.org/citations/25691885" target="\_blank">25691885</a>). Tryptophan shortage inhibits T lymphocytes division and accumulation of tryptophan catabolites induces T-cell apoptosis and differentiation of regulatory T-cells (PubMed:<a



href="http://www.uniprot.org/citations/25691885" target="\_blank">25691885</a>). Acts as a suppressor of anti-tumor immunity (PubMed:<a href="http://www.uniprot.org/citations/23103127" target="\_blank">23103127</a>, PubMed:<a href="http://www.uniprot.org/citations/25157255" target="\_blank">25157255</a>, PubMed:<a href="http://www.uniprot.org/citations/14502282" target="\_blank">14502282</a>, PubMed:<a href="http://www.uniprot.org/citations/25691885" target="\_blank">25691885</a>). Limits the growth of intracellular pathogens by depriving tryptophan (PubMed:<a href="http://www.uniprot.org/citations/25691885" target="\_blank">25691885</a>). Protects the fetus from maternal immune rejection (PubMed:<a href="http://www.uniprot.org/citations/25691885" target="\_blank">25691885</a>).

#### **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:26155395, PubMed:25691885).

# Anti-IDO1 / IDO Antibody (clone ID 177) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-IDO1 / IDO Antibody (clone ID 177) - Images