

IDO1 / IDO Antibody
Rabbit Polyclonal Antibody
Catalog # ALS17171**Specification**

IDO1 / IDO Antibody - Product Information

Application	IHC-P
Primary Accession	P14902
Other Accession	3620
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	45326

IDO1 / IDO Antibody - Additional Information**Gene ID** 3620**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

Human IDO1 / IDO

Reconstitution & Storage

PBS, pH 7.4, 0.03% Proclin 300, 50% glycerol. Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

IDO1 / IDO Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IDO1 / IDO Antibody - 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:23103127, PubMed:25157255, PubMed:14502282, 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

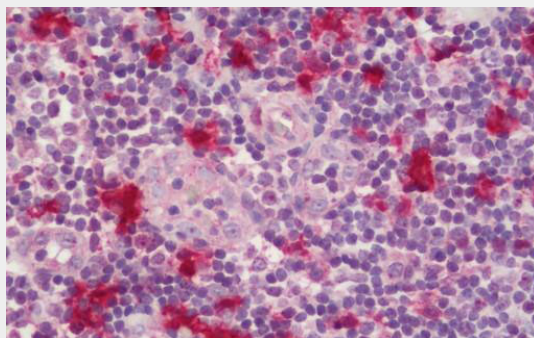
Expressed in mature dendritic cells located in lymphoid organs (including lymph nodes, spleen, tonsils, Peyer's patches, the gut lamina propria, and the thymic medulla), in some epithelial cells of the female genital tract, as well as in endothelial cells of term placenta and in lung parenchyma (PubMed:25691885). 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).

IDO1 / IDO Antibody - Protocols

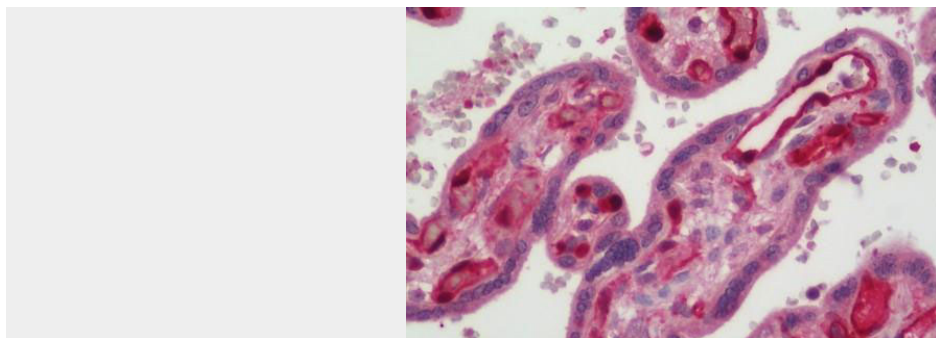
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

IDO1 / IDO Antibody - Images



Human Tonsil: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Placenta: Formalin-Fixed, Paraffin-Embedded (FFPE)

IDO1 / IDO Antibody - Background

Catalyzes the cleavage of the pyrrol ring of tryptophan and incorporates both atoms of a molecule of oxygen.

IDO1 / IDO Antibody - References

Dai W.,et al.Biochem. Biophys. Res. Commun. 168:1-8(1990).
Tone S.,et al.Nucleic Acids Res. 18:367-367(1990).
Kadoya A.,et al.Biochem. Biophys. Res. Commun. 189:530-536(1992).
He X.,et al.Submitted (JAN-2003) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).