

INDO / IDO Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF2460a**Specification**

INDO / IDO Antibody (internal region) - Product Information

Application	IHC
Primary Accession	P14902
Other Accession	NP_002155.1 , 3620
Predicted	Human, Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	45326

INDO / IDO Antibody (internal region) - Additional Information**Gene ID** 3620**Other Names**

Indoleamine 2, 3-dioxygenase 1, IDO-1, 1.13.11.52, Indoleamine-pyrrole 2, 3-dioxygenase, IDO1, IDO, INDO

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

INDO / IDO Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

INDO / IDO Antibody (internal region) - 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:<a

[25691885](http://www.uniprot.org/citations/25691885)). Tryptophan shortage inhibits T lymphocytes division and accumulation of tryptophan catabolites induces T-cell apoptosis and differentiation of regulatory T-cells (PubMed:[25691885](http://www.uniprot.org/citations/25691885)). Acts as a suppressor of anti-tumor immunity (PubMed:[23103127](http://www.uniprot.org/citations/23103127), PubMed:[25157255](http://www.uniprot.org/citations/25157255), PubMed:[14502282](http://www.uniprot.org/citations/14502282), PubMed:[25691885](http://www.uniprot.org/citations/25691885)). Limits the growth of intracellular pathogens by depriving tryptophan (PubMed:[25691885](http://www.uniprot.org/citations/25691885)). Protects the fetus from maternal immune rejection (PubMed:[25691885](http://www.uniprot.org/citations/25691885)).

Cellular Location

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

Tissue Location

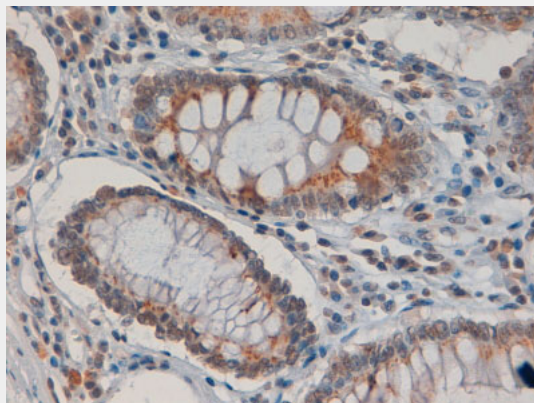
Expressed in mature dendritic cells located in lymphoid organs (including lymph nodes, spleen, tonsils, Peyer's patches, the gut lamina propria, and the thymic medulla), in some epithelial cells of the female genital tract, as well as in endothelial cells of term placenta and in lung parenchyma (PubMed:25691885).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

INDO / IDO Antibody (internal region) - 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](#)

INDO / IDO Antibody (internal region) - Images



AF2460a (4 µg/ml) staining of paraffin embedded Human Colon. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

INDO / IDO Antibody (internal region) - References

GCN2 kinase in T cells mediates proliferative arrest and anergy induction in response to indoleamine 2,3-dioxygenase. Munn DH, Sharma MD, Baban B, Harding HP, Zhang Y, Ron D, Mellor AL. Immunity. 2005 May;22(5):633-42. PMID: 15894280