

**IDO1 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP52020**

**Specification**

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**IDO1 Antibody - Product Information**

Application	<b>WB, E</b>
Primary Accession	<a href="#">P14902</a>
Reactivity	<b>Human, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>45 KDa</b>

**IDO1 Antibody - Additional Information**

**Gene ID** 3620

**Other Names**

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

**Format**

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**IDO1 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](http://www.uniprot.org/citations/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](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: [14502282](http://www.uniprot.org/citations/14502282), PubMed: [23103127](http://www.uniprot.org/citations/23103127), PubMed: [25157255](http://www.uniprot.org/citations/25157255), 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))

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, 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:25691885, PubMed:26155395).

#### IDO1 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 Antibody - Images

#### IDO1 Antibody - Background

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

#### IDO1 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).