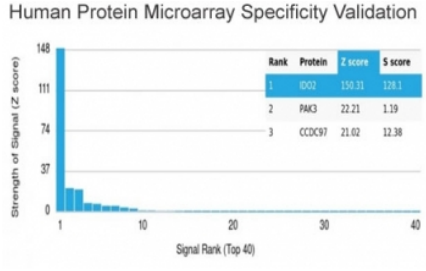
IDO2 Antibody / Tryptophan Catabolism Enzyme Antibody [clone IDO2/2640] (V9631)

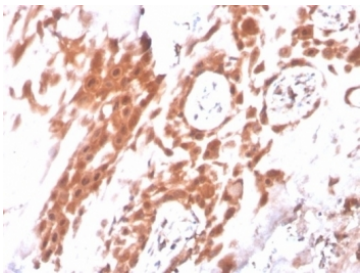
Catalog No.	Formulation	Size
V9631-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9631-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9631SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG, kappa
Clone Name	IDO2/2640
Purity	Protein A/G affinity
UniProt	Q6ZQW0
Localization	Cytoplasm
Applications	ELISA (order BSA-free format for coating) Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This IDO2 Antibody / Tryptophan Catabolism Enzyme Antibody is available for research use only.



IDO2 Antibody HuProt Microarray Specificity. Protein microarray analysis using IDO2 Antibody (clone IDO2/2640) demonstrates highly specific binding to IDO2 / Indoleamine 2,3-dioxygenase 2, with the target protein ranked as the top hit and showing a strong Z score with clear separation from all other proteins on the array. Signal intensity drops sharply for non-target proteins, supporting selective recognition with minimal off-target interaction. Z score represents the strength of signal in standard deviations above the mean of all array signals, while S score reflects the separation between ranked targets and provides a measure of relative specificity.



IDO2 Antibody Placental Tissue IHC. Immunohistochemistry analysis of FFPE human placental tissue using IDO2 Antibody (clone IDO2/2640) shows cytoplasmic staining in trophoblast cells, consistent with IDO2 / Indoleamine 2,3-dioxygenase 2 localization as a tryptophan catabolism enzyme. The staining highlights placental epithelial structures with moderate to strong signal, while surrounding stromal regions display comparatively lower intensity. Hematoxylin counterstain provides nuclear contrast and tissue architecture. Antibody incubation was performed at 2 ug/ml in PBS for 30 min at RT. HIER: boil FFPE tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min and allow to cool before testing.

Description

Indoleamine 2,3-dioxygenase 2 (IDO2), also known as INDOL1, is a cytosolic enzyme that catalyzes the first step in tryptophan catabolism along the kynurenine pathway. The IDO2 Antibody / Tryptophan Catabolism Enzyme Antibody is designed to detect this enzyme in biological systems where immune regulation and metabolic signaling are closely linked. IDO2 is encoded on chromosome 8p11 and is structurally related to IDO1, sharing functional roles in regulating tryptophan availability and downstream metabolite production. This antibody is part of a collection of Human Protein Microarray validated antibodies that have been screened for specificity across thousands of proteins.

The IDO2 antibody, also referred to as Indoleamine 2,3-dioxygenase 2 antibody and INDOL1 antibody in the literature, recognizes a protein that is predominantly localized in the cytoplasm. IDO2 participates in the oxidative cleavage of tryptophan, contributing to depletion of this essential amino acid and production of kynurenine metabolites. These metabolic changes influence immune cell activity, including T cell function and inflammatory responses, positioning IDO2 as a regulator of immune tolerance and immune microenvironment dynamics.

This IDO2 Antibody / Tryptophan Catabolism Enzyme Antibody is uniquely positioned for studies of immune metabolism and regulatory signaling pathways. In immunohistochemistry, IDO2 is typically observed as cytoplasmic staining in epithelial and immune-associated cells, reflecting its enzymatic role in intracellular metabolic processing. Detection of IDO2 expression can provide insight into metabolic adaptation and immune modulation within normal and disease-associated tissues.

IDO2 expression has been implicated in cancer, chronic inflammation, and immune-related disorders, where altered tryptophan metabolism contributes to immune suppression and tumor progression. The kynurenine pathway is increasingly recognized as a key regulatory axis in the tumor microenvironment, and IDO2 serves as a component of this pathway alongside IDO1 and other metabolic enzymes. Evaluation of IDO2 expression can therefore support studies of immune escape mechanisms and metabolic regulation in disease contexts.

The mouse monoclonal clone IDO2/2640 provides consistent detection of IDO2, supported by protein microarray specificity validation data demonstrating preferential binding to the intended target. This IDO2 Antibody / Tryptophan Catabolism Enzyme Antibody is suitable for detecting IDO2 expression in research applications focused on immune metabolism, tryptophan catabolism, and disease-associated metabolic signaling. Its performance supports detailed evaluation of IDO2 localization and function across diverse biological systems.

This antibody supports investigation of tryptophan metabolism, immune regulation, and disease-associated changes in IDO2 expression.

This antibody is part of a broader antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the IDO2 Antibody / Tryptophan Catabolism Enzyme Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 200-350 was used as the immunogen for the IDO2 antibody.

Storage

Aliquot the IDO2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

IDO2 antibody, Indoleamine 2,3-dioxygenase 2 antibody, INDOL1 antibody, IDO2 enzyme antibody, Tryptophan metabolism enzyme antibody

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com
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