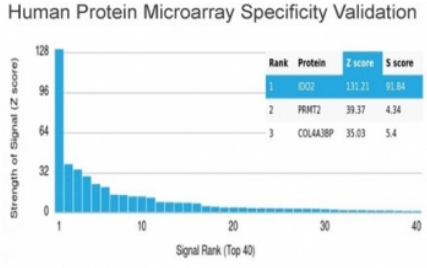
INDOL1 Antibody / Tryptophan Metabolism Enzyme Antibody [clone IDO2/2638] (V9591)

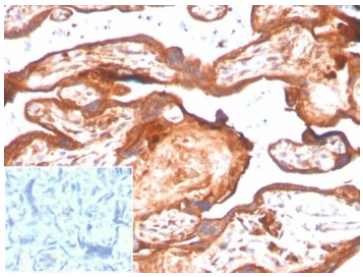
Catalog No.	Formulation	Size
V9591-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9591-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9591SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

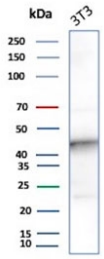
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG, kappa
Clone Name	IDO2/2638
Purity	Protein A/G affinity
UniProt	Q6ZQW0
Localization	Cytoplasm
Applications	ELISA (order BSA-free Format For Coating) : Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This INDOL1 Antibody / Tryptophan Metabolism Enzyme Antibody is available for research use only.



INDOL1 Antibody HuProt Microarray Specificity. Protein microarray analysis using INDOL1 Antibody (clone IDO2/2638) demonstrates highly specific binding to IDO2 / INDOL1 (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 decreases 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.



INDOL1 Antibody Placental Tissue IHC. Immunohistochemistry analysis of FFPE human placental tissue using INDOL1 Antibody (clone IDO2/2638) shows cytoplasmic staining in trophoblast cells, consistent with INDOL1 / IDO2 (Indoleamine 2,3-dioxygenase 2) localization as a tryptophan metabolism enzyme. The staining highlights placental epithelial structures with strong signal, while surrounding stromal regions display comparatively lower intensity. Negative control inset using PBS in place of primary antibody confirms minimal non-specific background staining. 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.



INDOL1 Antibody NIH 3T3 Cell WB. Western blot analysis of mouse NIH 3T3 cell lysate using INDOL1 Antibody (clone IDO2/2638) detects a band at approximately 47 kDa, consistent with the expected molecular weight of INDOL1 / IDO2 (Indoleamine 2,3-dioxygenase 2). The observed signal supports detection of this tryptophan metabolism enzyme in fibroblast-derived cells, aligning with its role in kynurenine pathway activity and immune-related metabolic regulation.

Description

INDOL1, also known as indoleamine 2,3-dioxygenase 2 (IDO2), is a cytosolic enzyme involved in the metabolism of tryptophan through the kynurenine pathway. The INDOL1 Antibody / Tryptophan Metabolism Enzyme Antibody is designed to detect this enzyme in biological systems where metabolic regulation and immune signaling intersect. INDOL1 represents an alternate nomenclature for IDO2 and is used in certain research contexts to describe this functionally important enzyme. This antibody is part of a collection of Human Protein Microarray validated antibodies that have been screened for specificity across thousands of proteins.

The INDOL1 antibody, also referred to as IDO2 antibody and Indoleamine 2,3-dioxygenase 2 antibody in the literature, recognizes a protein localized primarily in the cytoplasm. INDOL1 contributes to the oxidative metabolism of tryptophan, producing metabolites that influence immune cell behavior and inflammatory signaling pathways. This activity links metabolic processing with regulation of immune responses and cellular signaling networks.

This INDOL1 Antibody / Tryptophan Metabolism Enzyme Antibody is positioned as a supporting page for studies of IDO2 biology, providing complementary detection of the same target under alternate naming conventions. In immunohistochemistry, the protein is typically observed as cytoplasmic staining, reflecting its enzymatic function within cells. In western blot analysis, INDOL1 is detected at its expected molecular weight, supporting evaluation across multiple experimental systems.

Alterations in tryptophan metabolism are associated with cancer, immune tolerance, and inflammatory disease, where enzymes such as INDOL1 contribute to shaping the immune microenvironment. By influencing kynurenine production and tryptophan depletion, INDOL1 participates in pathways that regulate immune cell activity and tumor progression. Detection of INDOL1 expression therefore supports investigation of metabolic and immune regulatory mechanisms.

The mouse monoclonal clone IDO2/2638 provides reliable detection of INDOL1, supported by protein microarray specificity validation data demonstrating preferential binding to the intended target. This INDOL1 Antibody / Tryptophan Metabolism Enzyme Antibody is suitable for detecting INDOL1 expression in studies of metabolic signaling, immune regulation, and disease-associated pathway alterations.

This antibody supports investigation of tryptophan metabolism, immune signaling, and regulatory pathways involving INDOL1 / IDO2.

This antibody can be compared with our IDO2 Antibody (clone IDO2/2640) for consistent detection of IDO2 across tryptophan metabolism and immune regulatory studies.

Application Notes

Optimal dilution of the INDOL1 Antibody / Tryptophan Metabolism Enzyme Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 200-350 was used as the immunogen for the INDOL1 antibody.

Storage

Aliquot the INDOL1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

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

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