abcam

ab311847

Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89]

Recombinant | RabMAb | KO Validated | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR28349-89
Purification technique	Affinity purification Protein A
Concentration	0.508 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Human, Transfected cell line
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat, Transfected cell line
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/500
Notes	-

Species	Transfected cell line
Dilution info	1/500
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.

Notes	-

Not recommended

Species	Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Transfected cell line
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Mouse

Dilution info	1/1000
Notes	(0.508ug/ml)

Species	Human
Dilution info	-
Notes	(0.508ug/ml)

Not recommended

Species	Rat
Dilution info	-
Notes	(0.508ug/ml)

Species	Transfected cell line
Dilution info	-
Notes	-

Target data

See full target information Ido1

Function	Catalyzes the first and rate limiting step of the catabolism of the essential amino acid tryptophan along the kynurenine pathway. Involved in the peripheral immune tolerance, contributing to maintain homeostasis by preventing autoimmunity or immunopathology that would result from uncontrolled and overreacting immune responses. Tryptophan shortage inhibits T lymphocytes division and accumulation of tryptophan catabolites induces T-cell apoptosis and differentiation of regulatory T-cells. Acts as a suppressor of anti-tumor immunity (PubMed:25691885). Limits the growth of intracellular pathogens by depriving tryptophan. Protects the fetus from maternal immune rejection (PubMed:15063630).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C

Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Indoleamine 2 3-dioxygenase (IDO) also known as IDO1 is an enzyme involved in the catabolism of tryptophan to kynurenine. It weighs approximately 45 kDa and it is an important target in immunoregulatory processes. IDO is highly expressed in antigen-presenting cells such as dendritic cells and macrophages as well as in various tumor cells where it helps modulate immune responses. This enzyme can also be measured by using assays like IDO ELISA.
Biological function summary	IDO plays a role in immune response regulation by degrading tryptophan an essential amino acid needed for T-cell proliferation. The depletion of tryptophan and the accumulation of its metabolites such as kynurenine cause immunosuppressive effects within the tissue microenvironment. While IDO functions mostly as a standalone enzyme its activity influences the cellular surroundings by altering the balance of local immune reactions.
Pathways	IDO integrates into the tryptophan metabolism pathway and is important in the kynurenine pathway. Through this pathway it maintains immune homeostasis and cell defense mechanisms. Proteins like kynureninase and kynurenine 3-monooxygenase also participate in the same metabolic processes which further extend the effects of tryptophan metabolism on immune cell behavior.
Associated diseases and disorders	IDO is linked with cancer and chronic inflammatory conditions. In cancer elevated IDO expression suppresses anti-tumor immunity aiding tumor cells to evade immune surveillance. It also plays a role in autoimmune disorders by regulating

excessive immune activity. During cancer progression IDO often works in conjunction with immune checkpoint proteins like PD-L1 which further enhances its immunosuppressive capabilities within the tumor microenvironment.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

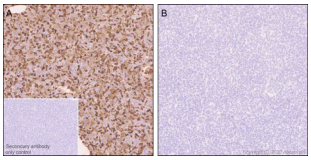
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

17 product images

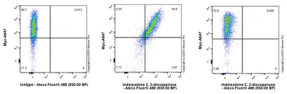


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Indoleamine 2, 3-dioxygenase Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of HEK-293T (human embryonic kidney epithelial cell) transfected with a IDO1 expression vector containing a his tag using rabbit Anti-Indoleamine 2, 3-dioxygenase antibody

Immunohistochemical analysis of paraffin-embedded (A) HEK-293T (human tissue labeling Indoleamine 2, 3-dioxygenase with ab311847 at 1/2000 (0.254 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on (A) HEK-293T transfected with an IDO1 expression vector containing a his tag. No staining on (B) HEK-293T transfected with IDO2 expression vector containing a his tag. The section was incubated with ab311847 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument incubate slides with 3% Hydrogen Peroxide for 10 mins at room temperature after secondary antibody incubation to reduce the background. Counterstained with Hematoxylin.

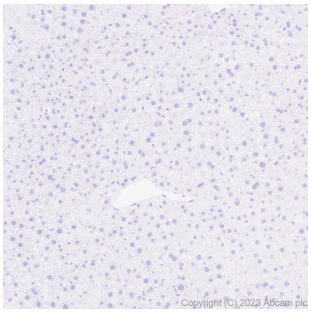
Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Flow Cytometry (Intracellular) - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Indoleamine 2, 3-dioxygenase Flow Cytometry (Intracellular) staining using rabbit Anti-Indoleamine 2, 3-dioxygenase antibody

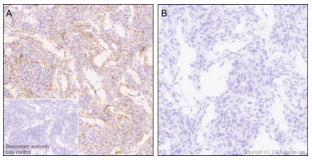
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Isotype control (Left) / HEK-293T (human embryonic kidney epithelial cell) transfected with an IDO1 expression vector containing a his tag (Middle) / HEK-293T transfected with IDO2 expression vector containing a his tag (Right) cells labelling Indoleamine 2, 3-dioxygenase with ab311847 at 1/500 dilution (0.1 ug)/Right (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Indoleamine 2, 3-dioxygenase Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse liver using rabbit Anti-Indoleamine 2, 3-dioxygenase antibody

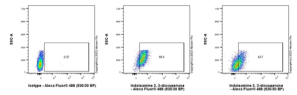
Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling Indoleamine 2, 3-dioxygenase with ab311847 at 1/2000 (0.254 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Negative control: no staining on mouse liver (PMID: 19741271). The section was incubated with ab311847 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument incubate slides with 3% Hydrogen Peroxide for 10 mins at room temperature after secondary antibody incubation to reduce the background. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Indoleamine 2, 3-dioxygenase Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of C2C12 treated with 50uM IFN-gamma for 24 hours cell pellet (treated) using rabbit Anti-Indoleamine 2, 3-dioxygenase antibody

Immunohistochemical analysis of paraffin-embedded (A) C2C12 (mouse myo tissue labelling Indoleamine 2, 3-dioxygenase with ab311847 at 1/500 (1.016 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on (A) C2C12 treated with 50uM IFN-gamma for 24 hours cell pellet (treated). No staining on (B) C2C12 cell pellet (untreated). The section was incubated with ab311847 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument incubate slides with 3% Hydrogen Peroxide for 10 mins at room temperature after secondary antibody incubation to reduce the background. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Flow Cytometry (Intracellular) - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

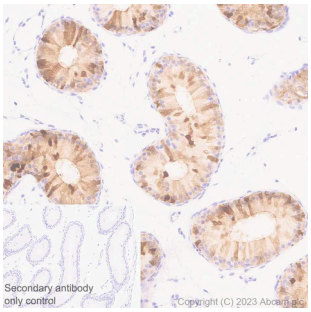
Indoleamine 2, 3-dioxygenase Flow Cytometry (Intracellular) staining using rabbit Anti-Indoleamine 2, 3-dioxygenase antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Isotype control (Left) /RAW 264.7 (mouse Abelson murine leukaemia virus-induced tumor macrophage) treated with 50ng/ml IFN-γ for 24h (Middle) / Untreated RAW 264.7 (Right) cells labelling Indoleamine 2, 3-dioxygenase with ab311847 at 1/500 dilution (0.1 ug)/Right (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



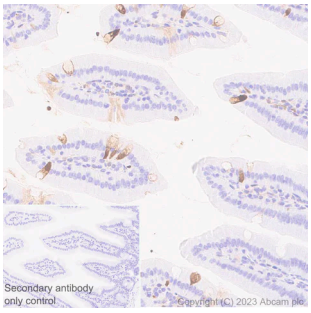
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Immunohistochemical analysis of paraffin-embedded Rat epididymis tissue labeling Indoleamine 2, 3-dioxygenase with ab311847 at 1/2000 (0.254 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on rat epididymis. The section was incubated with ab311847 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument incubate slides with 3% Hydrogen Peroxide for 10 mins at room temperature after secondary antibody incubation to reduce the background. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



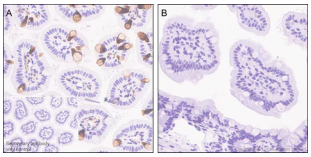
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Immunohistochemical analysis of paraffin-embedded Mouse epididymis tissue labeling Indoleamine 2, 3-dioxygenase with ab311847 at 1/2000 (0.254 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on mouse epididymis (PMID:19741271). The section was incubated with ab311847 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument incubate slides with 3% Hydrogen Peroxide for 10 mins at room temperature after secondary antibody incubation to reduce the background. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat-mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Immunohistochemical analysis of paraffin-embedded Mouse small intestine tissue labelling Indoleamine 2, 3-dioxygenase with ab311847 at 1/2000 (0.254 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on mouse small intestinal secretory epithelial cells (PMID: 31325428). The section was incubated with ab311847 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument incubate slides with 3% Hydrogen Peroxide for 10 mins at room temperature after secondary antibody incubation to reduce the background. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Indoleamine 2, 3-dioxygenase Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Indoleamine 2, 3-dioxygenase antibody

Immunohistochemical analysis of paraffin-embedded (A) Ileum tissue from wild-type C57BL/6J mice and (B) Ileum tissue from Indoleamine 2, 3-dioxygenase knockout mice tissue labeling Indoleamine 2, 3-dioxygenase with ab311847 at 1/2000 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).
Positive staining on (A) Ileum tissue from wild-type C57BL/6J mice, no staining on (B) Ileum tissue from Indoleamine 2, 3-dioxygenase knockout mice.

The primary antibody was incubated for 30 mins at room temperature, incubate slides with 3% Hydrogen Peroxide for 10 mins at room temperature after secondary antibody incubation to reduce the background.

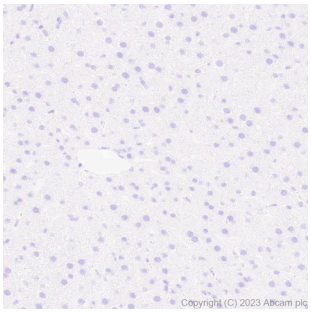
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

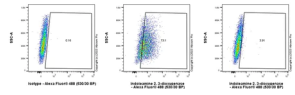
The tissue samples were kindly provided by GemPharmatech. C57BL/6JGpt wildtype mice and Ido1-KO homozygous mice (Strain ID: T011654).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

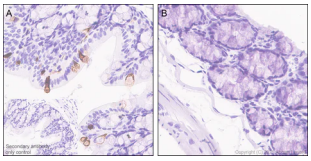
Indoleamine 2, 3-dioxygenase Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Rat liver using rabbit Anti-Indoleamine 2, 3-dioxygenase antibody

Immunohistochemical analysis of paraffin-embedded Rat liver tissue labeling Indoleamine 2, 3-dioxygenase with ab311847 at 1/2000 (0.254 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Negative control: no staining on rat liver. The section was incubated with ab311847 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument incubate slides with 3% Hydrogen Peroxide for 10 mins at room temperature after secondary antibody incubation to reduce the background. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Flow Cytometry (Intracellular) - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Isotype control (Left) / C2C12 (mouse myoblast) treated with 50ng/ml IFN-γ for 24h (Middle) / Untreated C2C12 (Right) cells labelling Indoleamine 2, 3-dioxygenase with ab311847 at 1/500 dilution (0.1 ug)/Right (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Indoleamine 2, 3-dioxygenase Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Indoleamine 2, 3-dioxygenase antibody

Immunohistochemical analysis of paraffin-embedded (A) Colon tissue from wild-type C57BL/6J mice and (B) Colon tissue from Indoleamine 2, 3-dioxygenase knockout mice tissue labeling Indoleamine 2, 3-dioxygenase with ab311847 at 1/2000 dilution.
Positive staining on (A) Colon tissue from wild-type C57BL/6J mice, no staining on (B) Colon tissue from Indoleamine 2, 3-dioxygenase knockout mice.

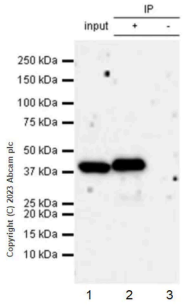
The primary antibody was incubated for 30 mins at room temperature, incubate slides with 3% Hydrogen Peroxide for 10 mins at room temperature after secondary antibody incubation to reduce the background.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

The tissue samples were kindly provided by GemPharmatech. C57BL/6JGpt wildtype mice and Ido1-KO homozygous mice (Strain ID: T011654).



Immunoprecipitation - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Indoleamine 2, 3-dioxygenase was immunoprecipitated from 0.35 mg C2C12 (mouse myoblast) treated with 50 ng/ml IFN gamma for 24 h, whole cell lysate with ab311847 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab311847 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution. Lane 1: C2C12 (mouse myoblast) treated with 50 ng/ml IFN gamma for 24 h, whole cell lysate Lane 2: C2C12 (mouse myoblast) treated with 50 ng/ml IFN gamma for 24 h, whole cell lysate Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab311847 in C2C12 treated with 50 ng/ml IFN gamma for 24 h whole cell lysate Blocking and dilution buffer and concentration: 5% NFDM/TBST.
Exposure time: 180 seconds
All lanes:
Immunoprecipitation - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847) at 1/30 dilution

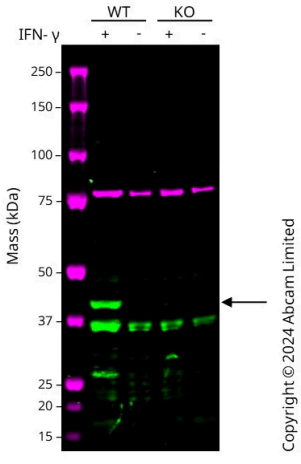
All lanes:
C2C12 (mouse myoblast) treated with 50 ng/ml IFN gamma for 24 h, whole cell lysate at 20 µg

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Observed band size: 45 kDa

Exposure time: 180s



Western blot - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Indoleamine 2, 3-dioxygenase Western blot staining using rabbit Anti-Indoleamine 2, 3-dioxygenase antibody

Western blot: Anti-IDO1 antibody [EPR28349-89] (ab311847) staining at 1/1000 dilution, shown in green; Mouse anti-CANX [CANX/1543] (ab238078) loading control staining at 1/20000 dilution, shown in magenta. In Western blot, ab311847 was shown to bind specifically to IDO1. A band was observed at 42 kDa in treated wild-type A549 cell lysates with no signal observed at this size in IDO1 knockout cell line. To generate this image, wild-type and IDO1 knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.
All lanes:
Western blot - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847) at 1/1000 dilution

Lane 1:

Wild-type A549 Treated IFN gamma (25 ng/mL, 48 h) ab281500 cell lysate at 20 µg

Lane 2:
Wild-type A549 Vehicle Control IFN gamma (0 ng/mL, 48 h) ab255554 cell lysate at 20 µg

Lane 3:
IDO1 knockout A549 Treated IFN gamma (25 ng/mL, 48 h) ab281489 cell lysate at 20 µg

Lane 4:
IDO1 knockout A549 Vehicle Control IFN gamma (0 ng/mL, 48 h) ab263515 cell lysate at 20 µg

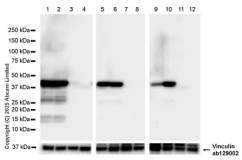
Secondary

All lanes:
Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 45 kDa

Observed band size: 42 kDa



Western blot - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Indoleamine 2, 3-dioxygenase Western blot staining using rabbit Anti-Indoleamine 2, 3-dioxygenase antibody

Exposure time: Lane 1-4: 1 second; Lane 5-8: 6 seconds; Lane 9-12: 15 seconds.
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

In Western blot, Anti-Vinculin antibody [EPR8185] - Loading Control (ab129002) staining at 1/5000 dilution.

The tissue samples were kindly provided by GemPharmatech. C57BL/6JGpt wildtype mice and Ido1-KO homozygous mice (Strain ID: T011654).

All lanes:
Western blot - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847) at 1/1000 dilution

Lane 1:
Wild-type mouse epididymis tissue lysate (male case1) at 40 µg

Lane 2:
Wild-type mouse epididymis tissue lysate (male case2) at 40 µg

Lane 3:
Ido1 knockout mouse epididymis tissue lysate (male case1) at 40 µg

Lane 4:
Ido1 knockout mouse epididymis tissue lysate (male case2) at 40 µg

Lane 5:
Wild-type mouse ileum tissue lysate (female case) at 40 µg

Lane 6:
Wild-type mouse ileum tissue lysate (male case) at 40 µg

Lane 7:
Ido1 knockout mouse ileum tissue lysate (male case1) at 40 µg

Lane 8:
Ido1 knockout mouse ileum tissue lysate (male case2) at 40 µg

Lane 9:
Wild-type mouse colon tissue lysate (female case) at 40 µg

Lane 10:
Wild-type mouse colon tissue lysate (male case) at 40 µg

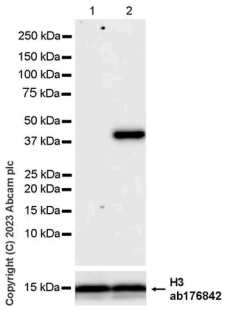
Lane 11:
Ido1 knockout mouse colon tissue lysate (male case1) at 40 µg

Lane 12:
Ido1 knockout mouse colon tissue lysate (male case2) at 40 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 45 kDa



Western blot - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Blocking and diluting buffer and concentration: 5% NFDM/TBST The expression of Indoleamine 2, 3-dioxygenase is upregulated in response to IFN gamma treatment (PMID:30809284, 34735466). In Western blot, anti-H3 antibody (ab176842) loading control staining at 1/100000 dilution. Exposure time: 180 seconds
All lanes:
Western blot - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847) at 1/1000 dilution

Lane 1:
Untreated C2C12 (mouse myoblast) whole cell lysate at 20 µg

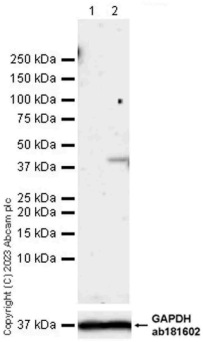
Lane 2:
C2C12 treated with /ml IFN gamma for 24 h, whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 45 kDa

Exposure time: 180s



Western blot - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847)

Blocking and diluting buffer and concentration: 5% NFDM/TBST The expression of Indoleamine 2, 3-dioxygenase is upregulated in response to IFN gamma treatment (PMID:30809284, 34735466). In Western blot, anti-GAPDH antibody (ab181602) loading control staining at 1/200000 dilution.
Exposure time: 180 seconds
All lanes:
Western blot - Anti-Indoleamine 2, 3-dioxygenase antibody [EPR28349-89] (ab311847) at 1/1000 dilution

Lane 1:
Untreated RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate at 20 µg

Lane 2:
RAW264.7 treated with /ml IFN gamma for 24 h, whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 45 kDa

Exposure time: 180s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.