abcam

ab269274

Anti-IL36 alpha/IL-1F6 antibody [EPR23152-241]

Recombinant | RabMAb | 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	EPR23152-241
Purification technique	Affinity purification Protein A
Concentration	0.575 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/500
Notes	-

Species	Rat
Dilution info	1/500
Notes	-

Species	Human
Dilution info	1/500
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Expected

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

IHC-Fr

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/600
Notes	-

Expected

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

Target data

See full target information IL36A

Function Cytokine that binds to and signals through the IL1RL2/IL-36R receptor which in turn activates NF-kappa-B and MAPK signaling pathways in target cells linked to a pro-inflammatory response. Part of the IL-36 signaling system that is thought to be present in epithelial barriers and to take part in local inflammatory response; similar to the IL-1 system with which it shares the coreceptor IL1RAP. Seems to be involved in skin inflammatory response by acting on keratinocytes, dendritic cells and indirectly on T-cells to drive tissue infiltration, cell maturation and cell

proliferation. In cultured keratinocytes induces the expression of macrophage, T-cell, and neutrophil chemokines, such as CCL3, CCL4, CCL5, CCL2, CCL17, CCL22, CL20, CCL5, CCL2, CCL17, CCL22, CXCL8, CCL20 and CXCL1, and the production of pro-inflammatory cytokines such as TNF, IL-8 and IL-6. In cultured monocytes up-regulates expression of IL-1A, IL-1B and IL-6. In myeloid dendritic cells involved in cell maturation by up-regulating surface expression of CD83, CD86 and HLA-DR. In monocyte-derived dendritic cells facilitates dendritic cell maturation and drives T-cell proliferation. May play a role in pro-inflammatory effects in the lung.

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	IL-36 alpha also known as IL-1F6 is a member of the IL-1 cytokine family and has a molecular mass of approximately 18 kDa. It is mostly expressed in epithelial

	tissues like the skin and lungs where it plays a role in the immune response. This protein acts as a pro-inflammatory mediator by binding to the IL-36 receptor stimulating the production of various cytokines and promoting inflammation.
Biological function summary	IL-36 alpha is involved in the activation of immune cells including macrophages and keratinocytes which further boosts the inflammatory response. It is not part of a larger complex but interacts with specific receptors on cell surfaces to exert its functions. This cytokine is known to enhance the expression of other inflammatory mediators which can amplify immune responses in the local tissue environment.
Pathways	IL-36 alpha takes part in the IL-1 signaling pathway and the NF-kB signaling pathway which are important for the regulation of immune and inflammatory responses. Through these pathways IL-36 alpha interacts with other proteins including IL-36 receptor antagonists and IL-37 to manage inflammation and regulate immune cell behavior. These pathways help in coordinating defense mechanisms under inflammatory conditions.
Associated diseases and disorders	IL-36 alpha has been linked to psoriasis and inflammatory bowel disease conditions that arise due to dysregulated immune responses. IL-36 alpha interacts with other proteins like IL-17 and TNF-alpha which are also involved in the pathophysiology of these diseases. Understanding its role in these processes may offer insights into potential therapeutic targets for treating such inflammatory disorders.

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

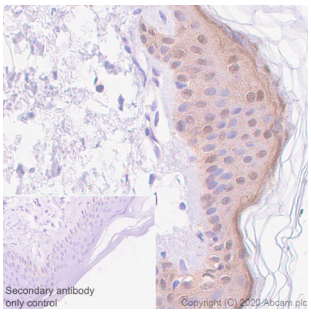
We do not recommend this combination. It is not covered by our product promise.

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.

7 product images

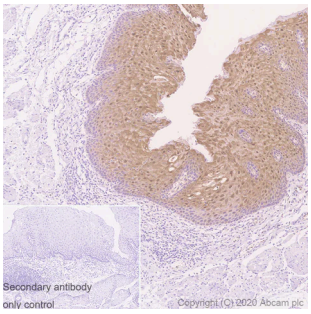


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL36 alpha/IL-1F6 antibody [EPR23152-241] (ab269274)

IL36 alpha/IL-1F6 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-IL36 alpha/IL-1F6 antibody

Immunohistochemical analysis of paraffin-embedded Human skin tissue labeling IL36 alpha/IL-1F6 with ab269274 at 1/500 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on human skin. The section was incubated with ab269274 for 30 mins at room temperature.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 Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

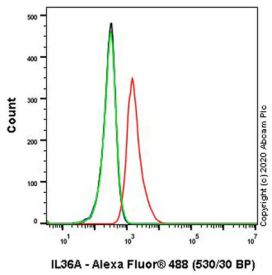


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL36 alpha/IL-1F6 antibody [EPR23152-241] (ab269274)

IL36 alpha/IL-1F6 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-IL36 alpha/IL-1F6 antibody

Immunohistochemical analysis of paraffin-embedded Human esophagus tissue labeling IL36 alpha/IL-1F6 with ab269274 at 500 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on human esophagus. The section was incubated with ab269274 for 30 mins at room temperature. 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 Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

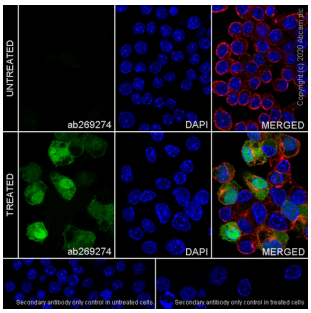
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Flow Cytometry (Intracellular) - Anti-IL36 alpha/IL-1F6 antibody [EPR23152-241] (ab269274)

IL36 alpha/IL-1F6 Flow Cytometry (Intracellular) staining using rabbit Anti-IL36 alpha/IL-1F6 antibody

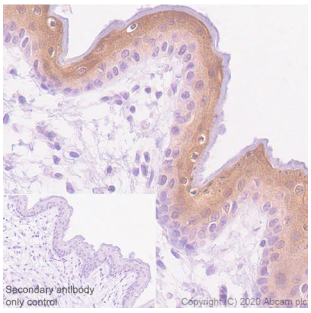
Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) treated with 1ug/ml lipopolysaccharide (LPS) for 24h (Red)/ Untreated control (Green) cells labelling IL36 alpha/IL-1F6 with ab269274 at 1/600 dilution (0.1ug) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-IL36 alpha/IL-1F6 antibody [EPR23152-241] (ab269274)

IL36 alpha/IL-1F6 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-IL36 alpha/IL-1F6 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized RAW264.7+LPS(1ug/ml, 24h)(-/+) cells labelling IL36 alpha/IL-1F6 with ab269274 at 1/50 dilution, followed by ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) secondary antibody at 1/1000 dilution (Green). Confocal image showing weak cytoplasmic and strong nuclear staining in RAW 264.7 cells treated with lipopolysaccharide (LPS, 1 ug/ml) for 24 hours. ab195889 Anti-alpha Tubulin antibody (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.

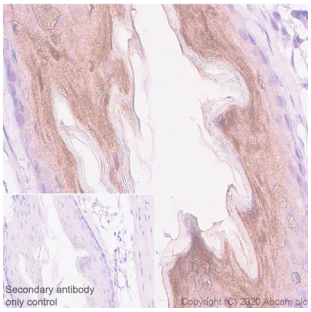


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL36 alpha/IL-1F6 antibody [EPR23152-241] (ab269274)

IL36 alpha/IL-1F6 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-IL36 alpha/IL-1F6 antibody

Immunohistochemical analysis of paraffin-embedded Rat esophagus tissue labeling IL36 alpha/IL-1F6 with ab269274 at 500 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on rat esophagus. The section was incubated with ab269274 for 30 mins at room temperature.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 Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

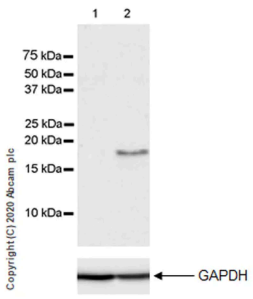


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL36 alpha/IL-1F6 antibody [EPR23152-241] (ab269274)

IL36 alpha/IL-1F6 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-IL36 alpha/IL-1F6 antibody

Immunohistochemical analysis of paraffin-embedded Mouse esophagus tissue labeling IL36 alpha/IL-1F6 with ab269274 at 1/500 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on mouse esophagus (PMID: 20101239). The section was incubated with ab269274 for 30 mins at room temperature.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 Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Western blot - Anti-IL36 alpha/IL-1F6 antibody [EPR23152-241] (ab269274)

IL36 alpha/IL-1F6 Western blot staining using rabbit Anti-IL36 alpha/IL-1F6 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST
The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID:10625660, 28857172)

Exposure time: 3 minutes

All lanes:
Western blot - Anti-IL36 alpha/IL-1F6 antibody [EPR23152-241] (ab269274) at 1/1000 dilution

Lane 1:
Untreated RAW 264.7 (mouse abelson murine leukemia virus-induced tumor macrophage) whole cell lysate at 10 µg

Lane 2:
RAW 264.7 treated with 1 µg/ml LPS for 24 hours whole cell lysate at 10 µg

Secondary

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

Predicted band size: 18 kDa

Observed band size: 17 kDa

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