abcam

ab300499

Anti-IL-1 alpha antibody [EPR25263-27]

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	EPR25263-27
Purification technique	Affinity purification Protein A
Concentration	0.525 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/500
Notes	-

Not recommended

Species	Rat, Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Not recommended

Species	Rat, 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.

Not recommended

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

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

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Not recommended

Species	Rat, Human
Dilution info	-
Notes	-

Target data

See full target information IL1A_MOUSE

Function Cytokine constitutively present intracellularly in nearly all resting non-hematopoietic cells that plays an important role in inflammation and bridges the innate and adaptive immune systems (PubMed:16256210). After binding to its receptor IL1R1 together with its accessory protein IL1RAP, forms the high affinity interleukin-1 receptor complex. Signaling involves the recruitment of adapter molecules such as MYD88, IRAK1 or IRAK4. In turn, mediates the activation of NF-kappa-B and the three MAPK pathways p38, p42/p44 and JNK pathways (PubMed:1386364). Within the cell, acts as an alarmin and cell death results in its liberation in the extracellular space after disruption of the cell membrane to induce inflammation and alert the host to injury or damage. In addition to its role as a danger signal, which occurs when the cytokine is passively released by cell necrosis, directly senses DNA damage and acts as a signal for genotoxic stress without loss of cell integrity (By similarity).

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.

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

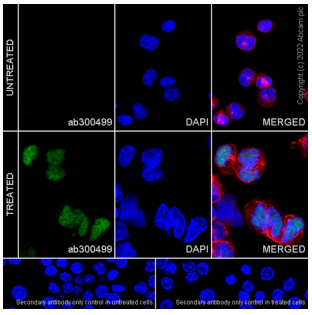
We do not recommend this combination. It is not covered by our product promise.

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.

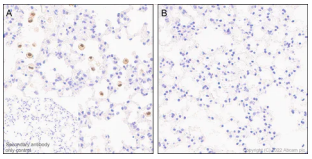
Full details and terms and conditions can be found here:
Terms & Conditions.

6 product images



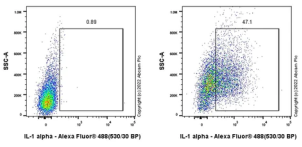
Immunocytochemistry/ Immunofluorescence - Anti-IL-1 alpha antibody [EPR25263-27] (ab300499)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized THP-1 (human monocytic leukemia monocyte) cells labelling IL-1 alpha with ab300499 at 1/50 (10.5 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/mL dilution (Green). Confocal image showing increased nuclear staining in THP-1 cells treated with Phorbol-12-myristate-13-acetate (50 nM) for 24 h. is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2ug/mL dilution.



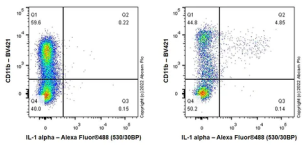
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL-1 alpha antibody [EPR25263-27] (ab300499)

Immunohistochemical analysis of paraffin-embedded A Mouse lung treate tissue labeling IL-1 alpha with ab300499 at 1/500 (1.05 ug/ml) followed by a ready to use LeicaDS9800 (Bond Polymer Refine Detection) was used. Positive staining on mouse lung induced by LPS (A) and no staining on untreated mouse lung. The section was incubated with ab300499 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 LeicaDS9800 (Bond Polymer Refine Detection) was used. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



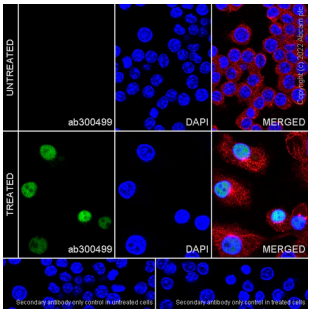
Flow Cytometry (Intracellular) - Anti-IL-1 alpha antibody [EPR25263-27] (ab300499)

Flow Cytometry (Intracellular) analysis of RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) treated with 10 µg/ml LPS for 24 hours (Right) / Untreated control (Left) IL-1 alpha with ab300499 at a 1/500 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A Goat Anti-Rabbit IgG (Alexa Fluor® 488, (ab150081)) was used as the secondary antibody at a 1/2000 dilution. The expression level of IL-1 alpha was upregulated by LPS stimulation (PMID: 25870118).



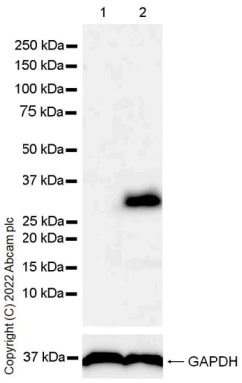
Flow Cytometry (Intracellular) - Anti-IL-1 alpha antibody [EPR25263-27] (ab300499)

Flow Cytometry (Intracellular) analysis of mouse bone marrow cells treated with 5 µg/ml LPS for 7 hours (Right) / Untreated control (Left) labelling IL-1 alpha with ab300499 at a 1/500 dilution. Cells were fixed with 2% paraformaldehyde and permeabilized using True-Nuclear buffer. A Goat Anti-Rabbit IgG (Alexa Fluor® 488, (ab150081)) was used as the secondary antibody at a 1/2000 dilution. Cells were surface stained with BV421 conjugated CD11b, then fixed with PFA followed by intracellularly stained with ab300499.



Immunocytochemistry/ Immunofluorescence - Anti-IL-1 alpha antibody [EPR25263-27] (ab300499)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized RAW 264.7 (mouse abelson murine leukemia virus-induced tumor macrophage) cells labelling IL-1 alpha with ab300499 at 1/50 (10.5 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/mL dilution (Green). Confocal image showing increased nuclear staining in Raw 264.7 cells treated with lipopolysaccharide (10 ug/ml) for 24 h (PMID:25870118) is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2ug/mL dilution.



Western blot - Anti-IL-1 alpha antibody [EPR25263-27] (ab300499)

Blocking and diluting buffer and concentration: 5% NFDM/TBST The expression level of IL-1 alpha was upregulated by LPS stimulation (PMID: 25870118)
All lanes:
Western blot - Anti-IL-1 alpha antibody [EPR25263-27] (ab300499) at 1/1000 dilution

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

Lane 2:
RAW264.7 treated with /ml lipopolysaccharide (LPS) for 7 hours, whole cell lysate 40 µg

Secondary

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

Observed band size: 30 kDa

Exposure time: 59s

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