

Product datasheet

Anti-IL-1 alpha antibody [EPR25263-27] ab300499

Recombinant RabMAb

7 Images

Overview

Product name	Anti-IL-1 alpha antibody [EPR25263-27]
Description	Rabbit monoclonal [EPR25263-27] to IL-1 alpha
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, Flow Cyt (Intra), ICC/IF Unsuitable for: IP
Species reactivity	Reacts with: Mouse Does not react with: Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: RAW264.7 treated with 10µg/ml lipopolysaccharide, whole cell lysate. ICC/IF: RAW 264.7 (mouse abelson murine leukemia virus-induced tumor macrophages), THP-1 (human monocytic leukemia monocytes). IHC-P: Mouse lung treated with lipopolysaccharides. Flow Cyt (Intra): RAW264.7 cells treated with 10ug/ml LPS, mouse bone marrow cells treated with 5ug/ml LPS.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR25263-27
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab300499 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

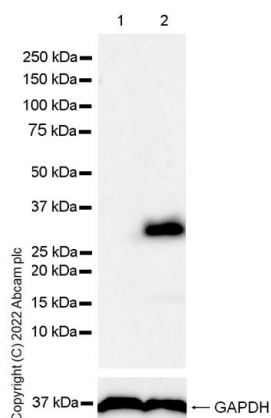
Application	Abreviews	Notes
WB		1/1000.
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		1/500.
ICC/IF		1/50.

Application notes Is unsuitable for IP.

Target

Function	Produced by activated macrophages, IL-1 stimulates thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL-1 proteins are involved in the inflammatory response, being identified as endogenous pyrogens, and are reported to stimulate the release of prostaglandin and collagenase from synovial cells.
Sequence similarities	Belongs to the IL-1 family.
Domain	The similarity among the IL-1 precursors suggests that the amino ends of these proteins serve some as yet undefined function.
Cellular localization	Secreted. The lack of a specific hydrophobic segment in the precursor sequence suggests that IL-1 is released by damaged cells or is secreted by a mechanism differing from that used for other secretory proteins.

Images



Western blot - Anti-IL-1 alpha antibody [EPR25263-27] (AB300499)

All lanes : 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 10µg/ml lipopolysaccharide (LPS) for 7 hours, whole cell lysate

Lysates/proteins at 40 µg per lane.

Secondary

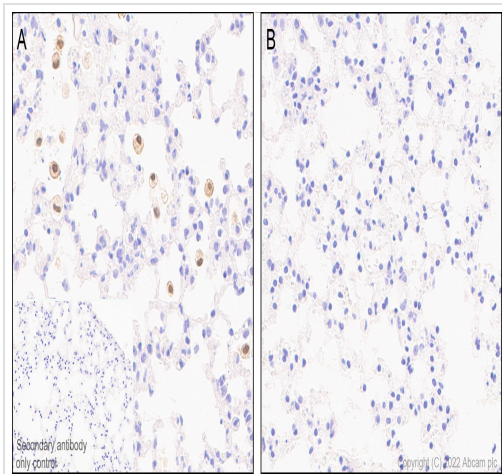
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Observed band size: 30 kDa

Exposure time: 59 seconds

Blocking / Diluting buffer and concentration: 5% NFDM/TBST

The expression level of IL-1 alpha was upregulated by LPS stimulation (PMID: 25870118)

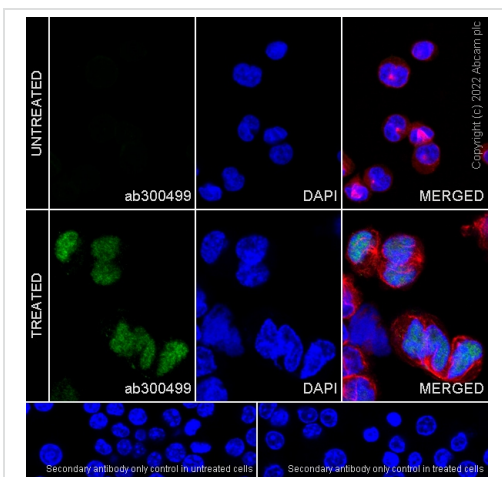


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL-1 alpha antibody [EPR25263-27] (AB300499)

Immunohistochemical analysis of paraffin-embedded Mouse lung treated tissue labeling IL-1 alpha with ab300499 at 1/500 dilution (1.05 µg/mL) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection kit). Positive staining on mouse lung induced by LPS+BFA (A) and no staining on untreated mouse lung (B). 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: PBS was used instead of primary antibody, followed by a ready to use secondary antibody LeicaDS9800 (Bond™ Polymer Refine Detection kit).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

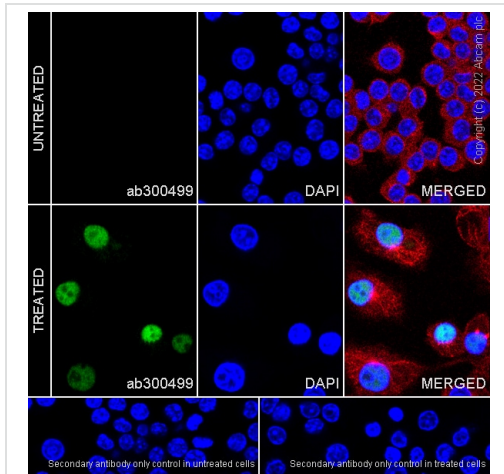


Immunocytochemistry/ Immunofluorescence - Anti-IL-1 alpha antibody [EPR25263-27] (ab300499)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized THP-1 (human monocytic leukemia monocyte) cells labeling IL-1 alpha with ab300499 at 1/50 (10.5 µg/ml) dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 µg/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 (2.5 µg/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 2µg/mL dilution.

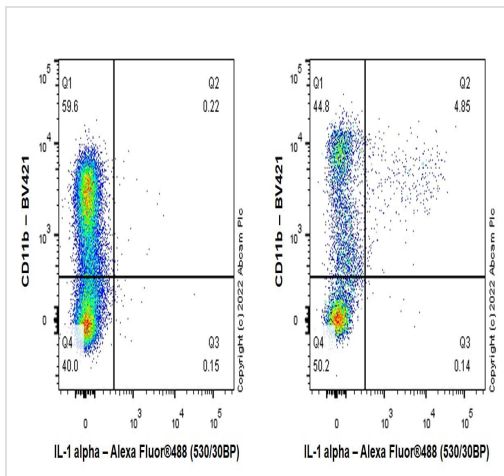


Immunocytochemistry/ Immunofluorescence - Anti-IL-1 alpha antibody [EPR25263-27] (ab300499)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized RAW 264.7 (mouse abelson murine leukemia virus-induced tumor macrophage) cells labeling IL-1 alpha with ab300499 at 1/50 (10.5 µg/ml) dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2µg/mL dilution (Green). Confocal image showing increased nuclear staining in Raw 264.7 cells treated with lipopolysaccharide (10 µg/ml) for 24 h (PMID:25870118) is observed.

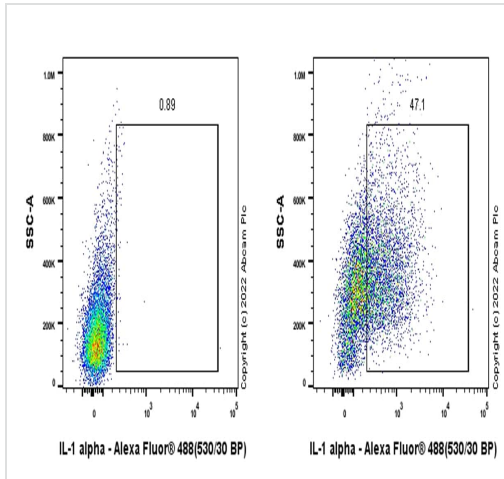
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Flow Cytometry (Intracellular) - Anti-IL-1 alpha antibody [EPR25263-27] (ab300499)

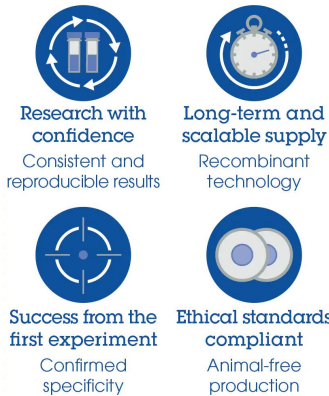
Flow Cytometry (Intracellular) analysis of mouse bone marrow cells treated with 5 µg/ml LPS for 7 hours (Right) / Untreated control (Left) labelling IL-1 alpha with ab300499 at a 1/500 dilution. Cells were fixed with 2% paraformaldehyde and permeabilized using True-Nuclear buffer. A Goat Anti-Rabbit 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.



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).

Why choose a recombinant antibody?



Anti-IL-1 alpha antibody [EPR25263-27] (AB300499)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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