abcam

Product datasheet

Anti-IL-1 alpha antibody [EPR25263-3] - BSA and Azide free ab300502

Recombinant RabMAb

6 Images

Overview

Product name Anti-IL-1 alpha antibody [EPR25263-3] - BSA and Azide free

Description Rabbit monoclonal [EPR25263-3] to IL-1 alpha - BSA and Azide free

Host species Rabbit

Specificity Human species reactivity is recommended based on IHC results, we do not guarantee human

species reactivity in WB.

Tested applications Suitable for: ICC/IF, WB, IHC-P

Unsuitable for: Flow Cyt (Intra) or IP

Species reactivity Reacts with: Mouse, Human

Does not react with: Rat

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

WB: RAW264.7 treated with 10µg/ml lipopolysaccharide (LPS) for 7 hours, whole cell lysate IHC-Positive control

> P: Mouse lung treated with lipopolysaccharides (1 µg/ml) for 16 h in vitro, human colon, and human colon cancer. ICC/IF: RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor

macrophage) treated with 10 ug/ml lipopolysaccharide

General notes ab300502 is a carrier free version of ab300501.

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of

BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes,

oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP,

biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the

need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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 production

For more information see here.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C.

Storage buffer pH: 7.2

Constituent: 100% PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR25263-3

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab300502 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
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 31 kDa. Human species reactivity is recommended based on IHC results, we do not guarantee human species reactivity in WB.
IHC-P		Use at an assay dependent concentration.

Application notes

Is unsuitable for Flow Cyt (Intra) or 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.

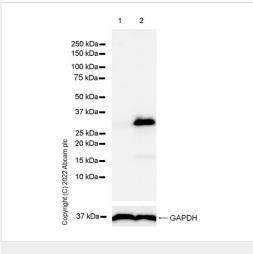
DomainThe similarity among the IL-1 precursors suggests that the amino ends of these proteins serve

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 [EPR25263-3] - BSA and Azide free (ab300502)

All lanes : Anti-IL-1 alpha antibody [EPR25263-3] (<u>ab300501</u>) 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 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

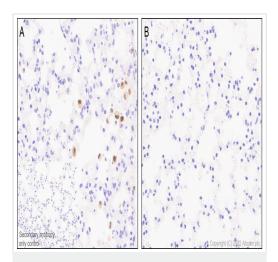
Predicted band size: 31 kDa **Observed band size:** 31 kDa

Exposure time: 15 seconds

This data was developed using <u>ab300501</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IL-1 alpha antibody

[EPR25263-3] - BSA and Azide free (ab300502)

This data was developed using <u>ab300501</u>, the same antibody clone in a different buffer formulation.

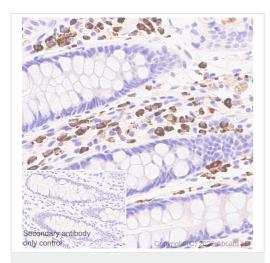
Immunohistochemical analysis of paraffin-embedded A: Mouse lung treated with lipopolysaccharides (1 µg/ml) for 16 h in vitro. B: Untreated mouse lung labelling IL-1 alpha with <u>ab300501</u> at 1/5000 dilution followed by a ready to use LeicaDS9800 (BOND™ Polymer Refine Detection). Positive staining on mouse lung induced by LPS (A) and no staining on untreated mouse lung (B). The section was incubated with <u>ab300501</u> 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 ready to use secondary antibody LeicaDS9800 (BOND™ Polymer Refine Detection).

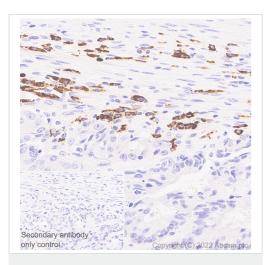
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins is used.

Secondary antibody only control: PBS was used instead of primary antibody followed by ready to use secondary antibody LeicaDS9800 (BOND™ Polymer Refine Detection).

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IL-1 alpha antibody
[EPR25263-3] - BSA and Azide free (ab300502)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IL-1 alpha antibody
[EPR25263-3] - BSA and Azide free (ab300502)

This data was developed using <u>ab300501</u>, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded human colon tissue labelling IL-1 alpha with <u>ab300501</u> at 1/5000 dilution followed by a ready to use LeicaDS9800 (BOND™ Polymer Refine Detection). Cytoplasmic staining on immune cells of human colon is observed. The section was incubated with <u>ab300501</u> 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 ready to use secondary antibody LeicaDS9800 (BOND™ Polymer Refine Detection).

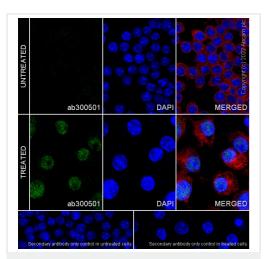
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins is used.

This data was developed using <u>ab300501</u>, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded human colon cancer tissue labelling IL-1 alpha with <u>ab300501</u> at 1/5000 dilution followed by a ready to use LeicaDS9800 (BOND™ Polymer Refine Detection). Cytoplasmic staining on immune cells of human colon cancer is observed. The section was incubated with <u>ab300501</u> 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 ready to use secondary antibody LeicaDS9800 (BOND™ Polymer Refine Detection).

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



Immunocytochemistry/ Immunofluorescence - Anti-IL-1 alpha antibody [EPR25263-3] - BSA and Azide free (ab300502)

This data was developed using <u>ab300501</u>, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized treated or untreated for 24h with 10 μ g/ml lipopolysaccharide RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate labeling IL-1 alpha with <code>ab300501</code> at 1/50 dilution, followed by (<code>ab150081</code>) Goat Anti-Rabbit IgG H&L (Alexa Fluor $^{\otimes}$ 488) preadsorbed secondary antibody at 1/1000 dilution (green). Confocal image showing increased nuclear staining in Raw 264.7 cells treated with lipopolysaccharide (10 μ g/ml) for 24 h (PMID:25870118). The nuclear counter stain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor[®] 594, **ab195889**) at 1/200 dilution (red).

Secondary antibody only controls: PBS was used instead of primary antibody in lipopolysacchride treated or untreated for 24h RAW 264.7 followed by preadsorbed (<u>ab150081</u>) Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) at 1/1000 dilution and nuclear stained with DAPI.



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