abcam

ab206410

Anti-IL-1 alpha antibody [EPR19904-247]

Recombinant | RabMAb

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	EPR19904-247
Purification technique	Affinity purification Protein A
Concentration	0.644 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/60
Notes	-

Target data

See full target information IL1A

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:26439902). After binding to its receptor IL1R1 together with its accessory protein IL1RAP, forms the high affinity interleukin-1 receptor complex (PubMed:17507369, PubMed:2950091). Signaling involves the recruitment of adapter molecules such as MYD88, IRAK1 or IRAK4 (PubMed:17507369). In turn, mediates the activation of NF-kappa-B and the three MAPK pathways p38, p42/p44 and JNK pathways (PubMed:14687581). 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 (PubMed:15679580). 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 (PubMed:26439902).

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

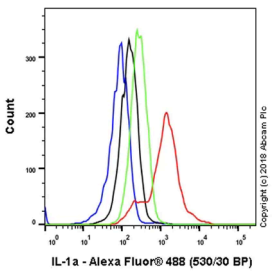
We do not recommend this combination. It is not covered by our product promise.

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.

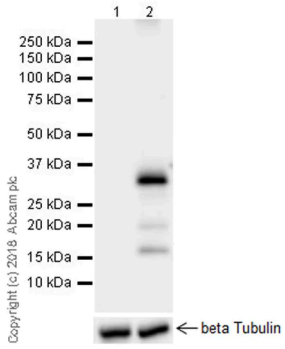
3 product images



Flow Cytometry (Intracellular) - Anti-IL-1 alpha antibody [EPR19904-247] (ab206410)

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

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized THP-1 (human monocytic leukemia cell line) cell line treated with 50 nM phorbol-12-myristate-13-acetate (PMA, ab120297) and 5 µg/ml lipopolysaccharide (LPS) for 24 hours (red) or an untreated control (green)labeling IL-1 alpha with ab206410 at 1/60 dilution compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluorr® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody.



Western blot - Anti-IL-1 alpha antibody [EPR19904-247] (ab206410)

IL-1 alpha Western blot staining using rabbit Anti-IL-1 alpha antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
Expression of IL-1 alpha can be induced by LPS in macrophages. The molecular masses observed are consistent with the literature (PMID: 9785472; PMID: 1868253; PMID:19104081).

All lanes:
Western blot - Anti-IL-1 alpha antibody [EPR19904-247] (ab206410) at 1/1000 dilution

Lane 1:
Untreated THP-1 (human monocytic leukemia cell line) whole cell lysate at 20 µg

Lane 2:
THP-1, treated with 50 nM phorbol-12-myristate-13-acetate (PMA, ab120297) and 5 ug/ml lipopolysaccharide (LPS) for 24 hours, whole cell lysate at 20 µg

Secondary

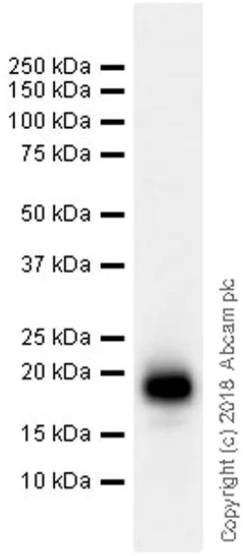
All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size: 31 kDa

Observed band size: 15 kDa, 20 kDa, 34 kDa

Exposure time: 15s

Western blot - Anti-IL-1 alpha antibody [EPR19904-247] (ab206410)



Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-IL-1 alpha antibody [EPR19904-247] (ab206410) at 1/1000 dilution

All lanes:
Human IL-1 alpha recombinant protein (aa113-271) at 0.01 µg

Secondary

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

Predicted band size: 31 kDa

Exposure time: 3s

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