abcam

ab245251

Anti-CCL3 / MIP-1 alpha antibody [EPR19900-147]

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	EPR19900-147
Purification technique	Affinity purification Protein A
Concentration	0.511 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Not recommended

Species	Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Target data

See full target information CCL3

Function	Monokine with inflammatory and chemokinetic properties. Binds to CCR1, CCR4 and CCR5. One of the major HIV-suppressive factors produced by CD8+ T-cells. Recombinant MIP-1-alpha induces a dose-dependent inhibition of different strains of HIV-1, HIV-2, and simian immunodeficiency virus (SIV).

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	MIP-1 alpha also known as CCL3 is a chemokine that plays a critical role in the immune system. With a molecular weight of around 8 kDa it is primarily expressed in activated T-cells macrophages and fibroblasts. MIP-1 alpha acts as a signaling protein that binds to receptors on target cells directing the movement of immune cells. Researchers commonly refer to it using various alternative names such as MIP-1a and CCL3-alpha rat and it is frequently measured using assays like MIP-1 alpha ELISA for experimental analyses.
Biological function summary	Proteins including MIP-1 alpha participate in the recruitment and activation of diverse immune cells aiding the inflammatory response. Through interaction with receptors like CCR1 and CCR5 MIP-1 alpha mobilizes cells like natural killer cells and monocytes. This chemokine does not generally form part of a larger protein complex but interacts directly with membrane receptors to exert its function in immune cell chemotaxis.
Pathways	MIP-1 alpha operates in the context of both the inflammatory response and the chemokine signaling pathways. Its involvement in these pathways helps mediate the trafficking of leukocytes. Notably MIP-1 alpha interacts with proteins such as CCR1 and CCR5 to transmit signals that instigate immune responses. These

proteins are integral to its role in modulating immunity providing targets for research into controlling inflammatory processes.

Associated diseases and disorders

MIP-1 alpha closely relates to conditions such as rheumatoid arthritis and HIV infection. In rheumatoid arthritis its overexpression can lead to excessive inflammation and joint destruction. Meanwhile in HIV infection MIP-1 alpha interacts with CCR5 a co-receptor necessary for the virus entry into cells. This dual relationship elucidates its potential as a therapeutic target in managing both inflammatory diseases and viral entry mechanisms.

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

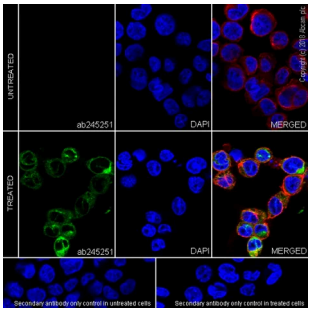
We do not recommend this combination. It is not covered by our product promise.

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.

2 product images



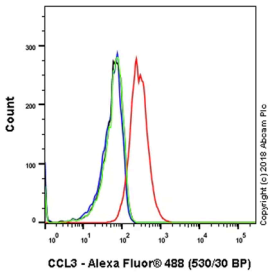
Immunocytochemistry/ Immunofluorescence - Anti-CCL3 / MIP-1 alpha antibody [EPR19900-147] (ab245251)

CCL3 / MIP-1 alpha Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CCL3 / MIP-1 alpha antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed 0.1% Triton X-100 permeabilized THP-1 (human monocytic leukemia cell line) cells treated with 80nM TPA overnight then treated with 100ng/ml LPS for 3h and together with 300ng/ml BFA for another 3h or Untreated control labeling Macrophage Inflammatory Protein 1 alpha / CCL3 with ab245251 at 1/100 dilution followed by

Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on THP-1 cells treated with 80nM TPA overnight then treated with 100ng/ml LPS for 3h and together with 300ng/ml BFA for another 3h. The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-CCL3 / MIP-1 alpha antibody [EPR19900-147] (ab245251)

CCL3 / MIP-1 alpha Flow Cytometry (Intracellular) staining using rabbit Anti-CCL3 / MIP-1 alpha antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 0.1% Tween-20-permeabilized THP-1 (human monocytic leukemia cell line) cell line, treated with 80nM TPA overnight, then treated with 100ng/ml LPS for 3h and together with 300ng/ml BFA for another 3h (red) orUntreated control (green),labeling Macrophage Inflammatory Protein 1 alpha / CCL3 with ab245251 at 1/500 dilution (red) 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 Fluor® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody.

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