abcam

ab318266

Anti-CCR3/CD193 antibody [EPR27419-30]

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	EPR27419-30
Purification technique	Affinity purification Protein A
Concentration	0.505 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Dot

Tested

Species	Synthetic peptide - Mouse
Dilution info	1/1000
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Not recommended

Species	Synthetic peptide - Mouse, Human, Rat
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Not recommended

Species	Synthetic peptide - Mouse, Human, Rat

Dilution info	-
Notes	-

WB

Not recommended

Species	Human, Rat, Mouse, Synthetic peptide - Mouse
Dilution info	-
Notes	-

Target data

See full target information CCR3/CD193

Function	G protein-coupled receptor (GPCR) that plays a key role in the immune system by regulating the migration and activation of white blood cells in response to chemokines. Selectively interacts with eosinophil-attracting chemokines such as eotaxin/CCL11, eotaxin-2/CCL24 and eotaxin-3/CCL26. Ligand binding triggers intracellular signaling that leads to chemotaxis of immune cells. Mechanistically, signals through GNA14 or GNA16 to induce stimulation of phospholipase Cbeta/PLCB2 and subsequently chemotaxis. Alternatively, transduces signal via GNAI1 resulting in elevated intracellular calcium levels and activation of the PI3K/AKT pathway. May also act as a possible functional receptor for NARS1.

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	CCR3 also known as C-C chemokine receptor type 3 is a protein that acts as a receptor for chemokines. The molecular weight of CCR3 is approximately 43 kDa. This protein is predominantly expressed in eosinophils and basophils and is also found in specific subsets of T cells. The expression of CCR3 in these cells plays an important role in directing their migration and activity. This receptor is part of the G protein-coupled receptor family which transduce signals across the cell membrane.
Biological function summary	CCR3 facilitates chemokine-directed migration of white blood cells an essential function for immune responses. It binds to several chemokines like eotaxin eotaxin-2 and RANTES which mediates the recruitment of eosinophils and other cells to sites of inflammation. CCR3 does not form part of a protein complex instead it interacts directly with its chemokine ligands. This activity enhances the body's ability to respond to allergic reactions and inflammatory processes.
Pathways	CCR3 plays a role in the signaling pathways that orchestrate immune cell trafficking and activation. It is involved in the chemokine signaling pathway which regulates cell movement and positioning and the calcium mobilization pathway through its ligand interaction. CCR3 along with other receptors like CCR5 and CXCR4 facilitates the communication between immune cells aiding in directed cell movement towards the inflammation site.
Associated diseases and disorders	CCR3 is notably involved in allergic disorders and asthma. Its expression influences the recruitment of eosinophils which are key players in these conditions. This receptor is linked to heightened inflammatory responses leading to tissue damage in chronic allergic diseases. The interaction of CCR3 with chemokines like eotaxin is significant in the pathophysiology of these diseases making it a potential target for therapeutic intervention to mitigate symptoms of chronic allergic responses.

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

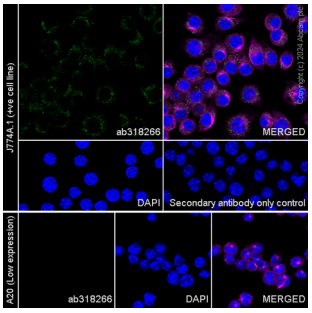
We do not recommend this combination. It is not covered by our product promise.

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.

5 product images



Immunocytochemistry/ Immunofluorescence - Anti-CCR3/CD193 antibody [EPR27419-30] (ab318266)

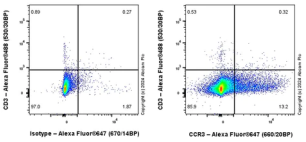
CCR3/CD193 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CCR3/CD193 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized J774A.1(mouse reticulum cell sarcoma monocyte/macrophage) cells labelling CCR3 with ab318266 at 1/50 (10.1 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green).

Confocal image showing cytoplasmic staining in J774A.1 cell line (shown in green). The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue).
Low expression: A20.
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Magenta). 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 2 ug/ml dilution.



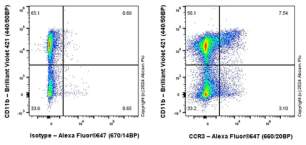
Flow Cytometry - Anti-CCR3/CD193 antibody [EPR27419-30] (ab318266)

CCR3/CD193 Flow Cytometry staining of Mouse bone marrow using rabbit Anti-CCR3/CD193 antibody

Flow cytometric analysis of Mouse bone marrow cells labelling CCR3 with ab318266 at 1/50 dilution (1ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat anti-Rabbit IgG (Alexa Fluor® 647, ab150083) at 1/5000 dilution was used as the secondary antibody.

Cells were co-stained with anti-CD3 cojugated to Alexa Fluor®488.
Gated on viable cells.



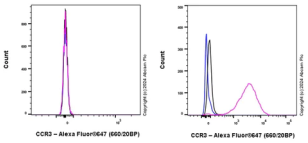
Flow Cytometry - Anti-CCR3/CD193 antibody [EPR27419-30] (ab318266)

CCR3/CD193 Flow Cytometry staining of Mouse bone marrow using rabbit Anti-CCR3/CD193 antibody

Flow cytometric analysis of Mouse bone marrow cells labelling CCR3 with ab318266 at 1/50 dilution (1ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat anti-Rabbit IgG (Alexa Fluor® 647, ab150083) at 1/5000 dilution was used as the secondary antibody.

Cells were co-stained with anti-CD11b conjugated to Brilliant Violet 421.
Gated on viable cells.



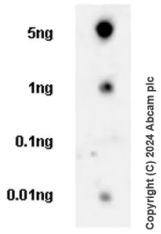
Flow Cytometry - Anti-CCR3/CD193 antibody [EPR27419-30] (ab318266)

CCR3/CD193 Flow Cytometry staining using rabbit Anti-CCR3/CD193 antibody

Flow cytometric analysis of J774A.1 (mouse reticulum cell sarcoma monocyte/macrophage) (Right) / A20 (mouse reticulum sarcoma B lymphocyte) (Left) cells labelling CCR3 with ab318266 at 1/50 dilution (1ug) / Magenta compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat anti-Rabbit IgG (Alexa Fluor® 647, ab150083) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells.
Low expression: A20.



Dot Blot - Anti-CCR3/CD193 antibody [EPR27419-30] (ab318266)

CCR3/CD193 Dot Blot staining of Mouse CCR3 peptide using rabbit Anti-CCR3/CD193 antibody

Dot blot analysis of CCR3 using ab318266 at 1:1000 (0.505 ug/ml) followed by a Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1:100,000 dilution.

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

All lanes:
Dot Blot - Anti-CCR3/CD193 antibody [EPR27419-30] (ab318266) at 1/1000 dilution

All lanes:
Mouse CCR3 peptide

Secondary

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

Exposure time: 180s

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