abcam

ab327652

Anti-C3AR1 antibody [EPR31126-546]

Recombinant | RabMAb | KO Validated | 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	EPR31126-546
Purification technique	Affinity purification Protein A
Concentration	0.517 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Transfected cell line - Mouse
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Human
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Not recommended

Species	Human, Transfected cell line - Mouse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/500
Notes	-

Not recommended

Species	Human, Transfected cell line - Mouse

Dilution info	-
Notes	-

Target data

See full target information C3AR1

Function	Receptor for the chemotactic and inflammatory peptide anaphylatoxin C3a, stimulating chemotaxis, granule enzyme release and superoxide anion production (PubMed:12871936, PubMed:37852260, PubMed:8702752). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase (PubMed:37852260). C3AR1 is coupled to G(i)/G(o) (GNAI1 or GNAO1) G alpha proteins and mediates inhibition of adenylate cyclase (PubMed:37852260).

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

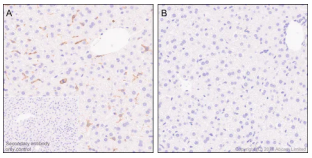
We do not recommend this combination. It is not covered by our product promise.

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.

10 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C3AR1 antibody [EPR31126-546] (ab327652)

C3AR1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-C3AR1 antibody

Immunohistochemical analysis of paraffin-embedded (A) Wild type C57BL/6J mouse liver and (B) C3ar1 knockout mouse liver tissue labeling with ab327652 at 1/1000 (0.507 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on (A) Wild type C57BL/6J mouse liver, no staining on (B) C3ar1 knockout mouse liver.

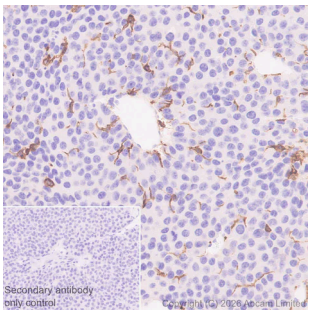
The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C3AR1 antibody [EPR31126-546] (ab327652)

C3AR1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse breast cancer using rabbit Anti-C3AR1 antibody

Immunohistochemical analysis of paraffin-embedded Mouse breast cancer tissue labeling with ab327652 at 1/1000 (0.507 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on immune cells of mouse breast cancer.

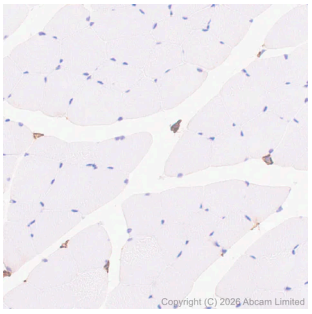
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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C3AR1 antibody [EPR31126-546] (ab327652)

C3AR1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-C3AR1 antibody

Immunohistochemical analysis of paraffin-embedded Mouse skeletal muscle tissue labeling with ab327652 at 1/1000 (0.507 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

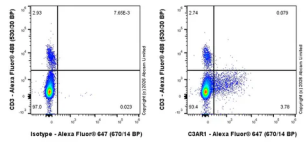
Low expression tissue: Positive staining on scattered immune cells of mouse skeletal muscle.

The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



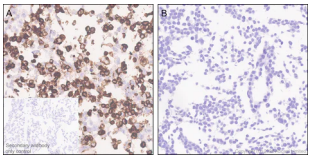
Flow Cytometry - Anti-C3AR1 antibody [EPR31126-546] (ab327652)

C3AR1 Flow Cytometry staining of Mouse bone marrow culture overnight using rabbit Anti-C3AR1 antibody

Flow cytometric analysis of Mouse bone marrow culture overnight labelling with ab327652 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).

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

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C3AR1 antibody [EPR31126-546] (ab327652)

C3AR1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-C3AR1 antibody

Immunohistochemical analysis of paraffin-embedded (A) HEK-293T (human embryonic kidney epithelial cell) transfected with a C3AR1 expression vector containing a his tag and (B) HEK-293T cells transfected with empty vector containing a myc-His-tag tissue labeling with ab327652 at 1/1000 (0.507 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on (A) HEK-293T transfected with a C3AR1 expression vector containing a his tag, no staining on (B) HEK-293T cells transfected with empty vector containing a myc-His-tag.

The primary antibody was incubated for 30 mins at room temperature.

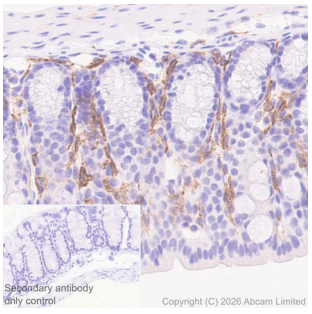
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C3AR1 antibody [EPR31126-546] (ab327652)

C3AR1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse colon using rabbit Anti-C3AR1 antibody

Immunohistochemical analysis of paraffin-embedded Mouse colon tissue labeling with ab327652 at 1/1000 (0.507 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on immune cells of mouse colon.

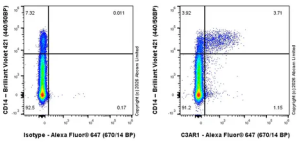
The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

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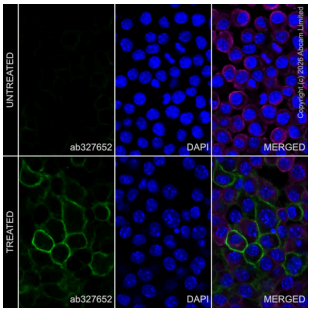
Flow Cytometry - Anti-C3AR1 antibody [EPR31126-546] (ab327652)

C3AR1 Flow Cytometry staining of Mouse bone marrow culture overnight using rabbit Anti-C3AR1 antibody

Flow cytometric analysis of Mouse bone marrow culture overnight labelling with ab327652 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).

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

Gated on viable cells.
Cells were co-stained with CD14 conjugated to Brilliant Violet 421.



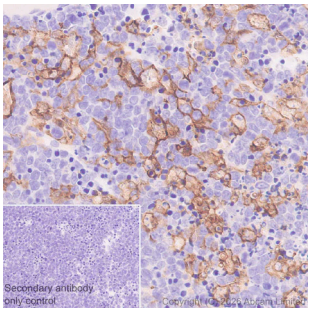
Immunocytochemistry/ Immunofluorescence - Anti-C3AR1 antibody [EPR31126-546] (ab327652)

C3AR1 Immunocytochemistry/ Immunofluorescence staining of J774A.1 treated with Lipopolysaccharides (1ug/ml) overnight using rabbit Anti-C3AR1 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized J774A.1 (mouse reticulum cell sarcoma monocyte/macrophage) and J774A.1 treated with Lipopolysaccharides (1ug/ml) overnight cells labelling with ab327652 at 1/500 (9.68 µg/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (Green).

Confocal image showing increased membranous staining in J774A.1 treated with Lipopolysaccharides (1ug/ml) overnight (shown in green). The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab7291 Anti-alpha Tubulin mouse monoclonal antibody was used to counterstain tubulin at 1/1000 dilution (Magenta). The Nuclear counterstain was DAPI (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C3AR1 antibody [EPR31126-546] (ab327652)

C3AR1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse Mantle cell lymphoma using rabbit Anti-C3AR1 antibody

Immunohistochemical analysis of paraffin-embedded Mouse Mantle cell lymphoma tissue labeling with ab327652 at 1/1000 (0.507 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on immune cells of mouse Mantle cell lymphoma.

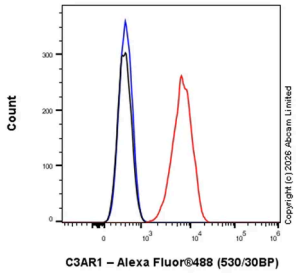
The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Flow Cytometry - Anti-C3AR1 antibody [EPR31126-546] (ab327652)

C3AR1 Flow Cytometry staining of J774A.1 (mouse reticulum cell sarcoma monocyte/macrophage) using rabbit Anti-C3AR1 antibody

Flow cytometric analysis of J774A.1 (mouse reticulum cell sarcoma monocyte/macrophage) labelling with ab327652 at 1/50 dilution (1ug) / Red compared with a Rabbit monoclonal IgG (ab172730) / Black isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells.

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