abcam

ab313773

Anti-CCR9/CD199 antibody [EPR26524-59]

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	EPR26524-59
Purification technique	Affinity purification Protein A
Concentration	0.494 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/100 - 1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

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

Flow Cyt

Tested

Species	Human
Dilution info	1/50
Notes	-

Species	Mouse
Dilution info	1/50
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50

Notes	-

Expected

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

Not recommended

Species	Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	We recommend not boiling the lysate before loading it onto the gel.

Expected

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

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information CCR9/CD199

Function	Receptor for chemokine SCYA25/TECK. Subsequently transduces a signal by increasing the intracellular calcium ions level. (Microbial infection) Alternative coreceptor with CD4 for HIV-1 infection.

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	CCR9 also known as CD199 is a chemokine receptor known for its role in guiding cell traffic. It is a G-protein-coupled receptor with a mass of approximately 43 kDa.

	CCR9 is mainly expressed on the surface of thymocytes T lymphocytes and some subsets of dendritic cells. Its presence is especially noted in the small intestine correlated with its role in the migration and function of immune cells in the gut. This receptor is important for the homing of these cells to the intestinal mucosa engaging specifically with its ligand CCL25.
Biological function summary	CCR9 plays a significant role in the immune system particularly in the gut. It is part of chemokine receptor-ligand complexes that are integral to leukocyte trafficking. By interacting with CCL25 CCR9 facilitates the directed movement of immune cells across intestinal tissue impacting the immune surveillance and response within this environment. The receptor's expression pattern also suggests involvement in thymocyte development supporting the immune system's ability to generate a diverse repertoire of T cells.
Pathways	CCR9 is an important component of the chemokine signaling pathway. It is intricately connected to G-protein signaling events triggering downstream effects that drive cell migration and adhesion. This pathway is important for the function and maintenance of mucosal immunity linking CCR9 with CCR7 and its role in guiding T cell migration to specific tissue sites. These pathways collectively support immune functionality and homeostasis underlining CCR9's significance in tissue-specific immunity.
Associated diseases and disorders	CCR9 has associations with inflammatory disorders like Crohn's disease and ulcerative colitis. Inflammatory bowel disease (IBD) is marked by aberrant immune cell movement and function areas where CCR9 is particularly influential. The receptor's interaction with CCL25 is pivotal in these pathological conditions often being a therapeutic target to modulate immune cell trafficking in disease management. Additionally the altered expression of CCR9 may contribute to the progression of specific T-cell leukemias further emphasizing its clinical relevance.

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

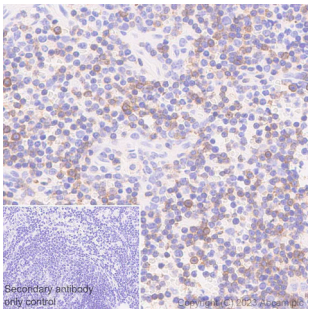
We do not recommend this combination. It is not covered by our product promise.

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.

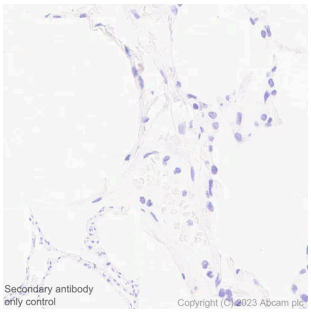
11 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CCR9/CD199 antibody [EPR26524-59] (ab313773)

CCR9/CD199 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human thymus using rabbit Anti-CCR9/CD199 antibody

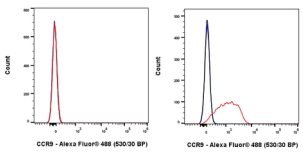
Immunohistochemical analysis of paraffin-embedded Human thymus tissue labeling CCR9 with ab313773 at 1/500 (0.988 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human thymus. The section was incubated with ab313773 for 30 mins at room temperature. 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-CCR9/CD199 antibody [EPR26524-59] (ab313773)

CCR9/CD199 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human lung using rabbit Anti-CCR9/CD199 antibody

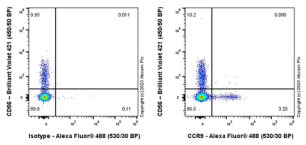
Immunohistochemical analysis of paraffin-embedded Human lung tissue labeling CCR9 with ab313773 at 1/500 (0.988 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Negative control: No staining on human lung. (PMID: 26168791) The section was incubated with ab313773 for 30 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-CCR9/CD199 antibody [EPR26524-59] (ab313773)

CCR9/CD199 Flow Cytometry staining using rabbit Anti-CCR9/CD199 antibody

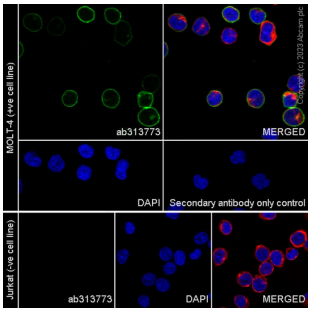
Flow cytometric analysis of Jurkat (human T cell leukemia T lymphocyte from peripheral blood, Left) / MOLT-4 (human lymphoblastic leukemia T lymphoblast, Right) cells labelling CCR9 with ab313773 at 1/50 dilution (1 ug)/Red compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody. Negative control: Jurkat (PMID: 19525985). Gated on viable cells.



Flow Cytometry - Anti-CCR9/CD199 antibody [EPR26524-59] (ab313773)

CCR9/CD199 Flow Cytometry staining of Human PBMC (human peripheral blood mononuclear cell) using rabbit Anti-CCR9/CD199 antibody

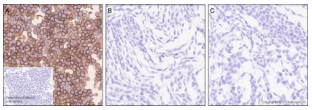
Flow cytometric analysis of Human PBMC (human peripheral blood mononuclear cell) cells labelling CCR9 with ab313773 at 1/50 dilution (1 ug)/Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody). Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody. Cells are co-stained with CD56 conjugated to BV421. Gated on viable cells.



Immunocytochemistry/ Immunofluorescence - Anti-CCR9/CD199 antibody [EPR26524-59] (ab313773)

CCR9/CD199 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CCR9/CD199 antibody

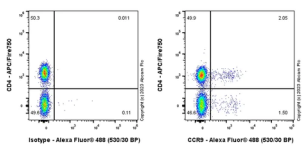
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Tween-20 permeabilized MOLT-4 (human lymphoblastic leukemia T lymphoblast) cells labelling CCR9 with ab313773 at 1/50 (9.88 µg/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 µg/ml) dilution (Green). Confocal image showing membrane staining in MOLT-4 cell line. Negative control: Jurkat (PMID: 19525985). 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 (2.5 µg/ml) dilution (Red). 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 µg/ml) dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CCR9/CD199 antibody [EPR26524-59] (ab313773)

CCR9/CD199 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CCR9/CD199 antibody

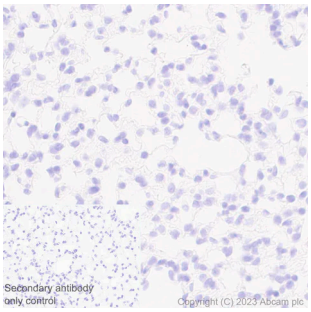
Immunohistochemical analysis of paraffin-embedded (A) MOLT-4 (human lymphoblastic tissue labeling CCR9 with ab313773 at 1/500 (0.988 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on (A) MOLT-4 (human lymphoblastic leukemia T lymphoblast) cell pellets, no staining on (B) HepG2 (human hepatocellular carcinoma epithelial cell) cell pellets and (C) Jurkat (human T cell leukemia T lymphocyte from peripheral blood) cell pellets. The section was incubated with ab313773 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-CCR9/CD199 antibody [EPR26524-59] (ab313773)

CCR9/CD199 Flow Cytometry staining of Human PBMC (human peripheral blood mononuclear cell) using rabbit Anti-CCR9/CD199 antibody

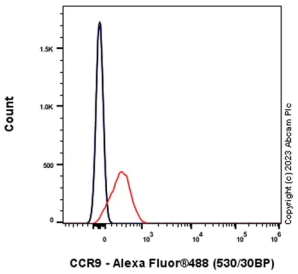
Flow cytometric analysis of Human PBMC (human peripheral blood mononuclear cell) cells labelling CCR9 with ab313773 at 1/50 dilution (1 ug)/Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody. Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody. Cells are co-stained with CD4 conjugated to APC/Fire750. Gated on viable cells.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CCR9/CD199 antibody [EPR26524-59] (ab313773)

CCR9/CD199 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse lung using rabbit Anti-CCR9/CD199 antibody

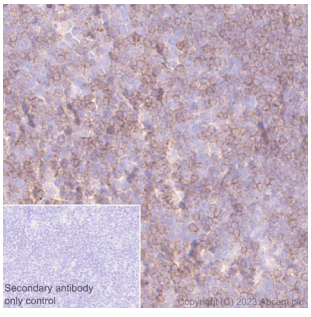
Immunohistochemical analysis of paraffin-embedded Mouse lung tissue labeling CCR9 with ab313773 at 1/100 (4.94 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Negative control: No staining on mouse lung. The section was incubated with ab313773 for 30 mins at room temperature. 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-CCR9/CD199 antibody [EPR26524-59] (ab313773)

CCR9/CD199 Flow Cytometry staining of Mouse thymocytes using rabbit Anti-CCR9/CD199 antibody

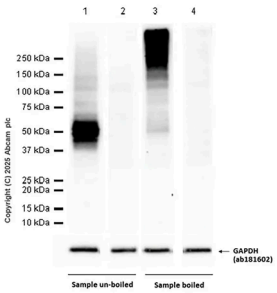
Flow cytometric analysis of Mouse thymocytes cells labelling CCR9 with ab313773 at 1/50 dilution (1 ug)/Red compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody. Gated on viable double positive CD4+ CD8+ cells.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CCR9/CD199 antibody [EPR26524-59] (ab313773)

CCR9/CD199 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse thymus using rabbit Anti-CCR9/CD199 antibody

Immunohistochemical analysis of paraffin-embedded Mouse thymus tissue labeling CCR9 with ab313773 at 1/100 (4.94 µg/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on mouse thymus. The section was incubated with ab313773 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



Western blot - Anti-CCR9/CD199 antibody [EPR26524-59] (ab313773)

CCR9/CD199 Western blot staining using rabbit Anti-CCR9/CD199 antibody

Jurkat cells serve as a negative control for CCR9 protein expression (PMID: 10544196).

We recommend not boiling the lysate before loading it onto the gel.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/1000000 dilution.

All lanes:
Western blot - Anti-CCR9/CD199 antibody [EPR26524-59] (ab313773) at 1/1000 dilution

Lane 1:
Un-boiled MOLT-4 (human lymphoblastic leukemia T lymphoblast) whole cell lysate

Lane 2:
Un-boiled Jurkat (human T cell leukemia T lymphocyte) whole cell lysate

Lane 3:
Boiled MOLT-4 (human lymphoblastic leukemia T lymphoblast) whole cell lysate

Lane 4:
Boiled Jurkat (human T cell leukemia T lymphocyte) whole cell lysate

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Performed under non-reducing conditions.

Observed band size: 45-50 kDa

Exposure time: 60s

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