abcam

ab324333

PE Anti-CCR4/CD194 antibody [EPR27421-23]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR27421-23
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Transfected cell line - Mouse
Dilution info	1/5000

Notes	-

Species	Mouse
Dilution info	1/50
Notes	-

ICC/IF

Not recommended

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

Target data

See full target information CCR4/CD194

Function	High affinity receptor for the C-C type chemokines CCL17/TARC and CCL22/MDC. The activity of this receptor is mediated by G(i) proteins which activate a phosphatidylinositol-calcium second messenger system. Could play a role in lipopolysaccharide (LPS)-induced endotoxic shock. In the CNS, could mediate hippocampal-neuron survival.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Store in the dark

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	CCR4 also known as C-C chemokine receptor type 4 is a G protein-coupled receptor with the molecular mass of approximately 41 kDa. It is predominantly expressed on the surface of T-helper 2 cells regulatory T cells and certain dendritic cells. CCR4 functions by binding chemokines such as CCL17 and CCL22 facilitating chemotaxis of immune cells to sites of inflammation. Researchers often refer to antibodies targeting CCR4 like mogamulizumab when studying immune responses.
Biological function summary	CCR4 plays an important role in the trafficking of immune cells to inflammatory sites therefore regulating immune response and tolerance. It is part of the chemokine receptor family which is integral to the immune system's function. CCR4 helps maintain the balance between effector and regulatory T cells contributing to immunological homeostasis. Its involvement in migration and positioning of immune cells within lymphoid and peripheral tissues highlights its importance in maintaining immune surveillance.
Pathways	CCR4 significantly influences the chemokine signaling pathway which is pivotal in directing the movement and positioning of immune cells. This receptor interacts with key proteins like CCL17 and CCL22 to mediate cell chemotaxis in these pathways. Additionally CCR4 is associated with the T-cell receptor signaling pathway where it coordinates with other receptors and proteins to modulate immune responses.
Associated diseases and disorders	Increased CCR4 expression has connections with various conditions such as adult T-cell leukemia/lymphoma and cutaneous T-cell lymphomas. In these diseases CCR4 assists tumor cells in evading the immune system fueling disease progression. Proteins like TARC (thymus and activation-regulated chemokine) and MDC (macrophage-derived chemokine) ligands for CCR4 often facilitate tumor cell migration and proliferation. Therapeutic approaches targeting CCR4 such as the anti-CCR4 antibody mogamulizumab have shown potential in treating these malignancies by disrupting these interactions.

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

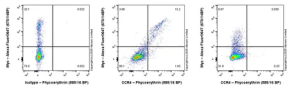
We do not recommend this combination. It is not covered by our product promise.

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

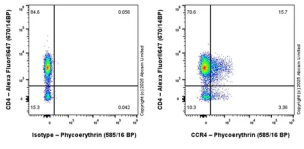


Flow Cytometry - PE Anti-CCR4/CD194 antibody [EPR27421-23] (ab324333)

CCR4/CD194 Flow Cytometry staining using rabbit Anti-CCR4/CD194 antibody

Flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized Isotype (Left) / 293T cells transfected with a mouse CCR4 expression vector containing a myc-His-tag® (Middle) / 293T cells transfected with an empty expression vector containing a myc-His-tag® (Right) cells labelling CCR4 with ab324333 at 1/5000 dilution (0.01ug) / Middle and Right compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Phycoerythrin) (ab209478) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Cells were surface stained with isotype control or our antibody. Then fixed with 2% PFA for 10min followed by intracellularly stained with anti-myc tag conjugated to Alexa Fluor® 647.



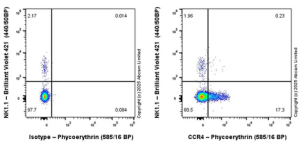
Flow Cytometry - PE Anti-CCR4/CD194 antibody [EPR27421-23] (ab324333)

CCR4/CD194 Flow Cytometry staining of Mouse thymocyte using rabbit Anti-CCR4/CD194 antibody

Flow cytometric analysis of Mouse thymocyte cells labelling CCR4 with ab324333 at 1/50 dilution (1ug) / Right compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Phycoerythrin)

(ab209478) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Cells are co-stained with CD4 conjugated Alexa Fluor® 647.
Gated on viable cell.



Flow Cytometry - PE Anti-CCR4/CD194 antibody [EPR27421-23] (ab324333)

CCR4/CD194 Flow Cytometry staining of Mouse thymocyte using rabbit Anti-CCR4/CD194 antibody

Flow cytometric analysis of Mouse thymocyte cells labelling CCR4 with ab324333 at 1/50 dilution (1ug) / Right compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Phycoerythrin) (ab209478) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Cells are co-stained with NK1.1 conjugated Brilliant Violet 421.
Gated on viable cell.

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