abcam

ab321969

Anti-FCRL5 antibody [EPR26948-187] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR26948-187
Purification technique	Affinity purification Protein A
Concentration	1.013 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-

Notes	-

Target data

See full target information FCRL5

Function	Plays an important role in B-cell response to antigen that acts both as a negative or positive coreceptor. Inhibits B-cell receptor (BCR) signaling in the absence of CR2 stimulation but engagement with CR2 and the BCR lead to a superior calcium response compared to CR2 and BCR costimulation (PubMed:30107486). May be involved in B-cell development and differentiation in peripheral lymphoid organs and may be useful markers of B-cell stages. May have an immunoregulatory role in marginal zone B-cells. May play a role in fertilization (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab321969 is the carrier-free version of ab321968.

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.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The FCRL5 also known as CD307 or Fc receptor-like 5 is a protein predominantly expressed on the surface of B cells and plasma cells. This protein weighs approximately 98 kDa. FCRL5 features structural similarities to classical Fc receptors suggesting a role in immune responses. Its expression is tightly regulated throughout B cell development and has been detected in lymphoid tissues with higher levels reported in bone marrow and secondary lymphoid organs.
Biological function summary	FCRL5 modulates the immune system by influencing B cell activation and differentiation. It participates in the formation of immune complexes playing a dual role in both promoting and inhibiting immune responses depending on the surrounding conditions. This regulatory function suggests that FCRL5 can adjust immune system activities to maintain homeostasis. It acts independently and might form complexes with other immune regulatory proteins to fine-tune B cell responses.
Pathways	FCRL5 plays a role in the adaptive immune response and is associated with the B cell receptor (BCR) signaling pathway. It interacts with proteins such as CD19 and CD79 influencing downstream signaling cascades critical for B cell maturation and effector functions. The interaction of FCRL5 with these pathways highlights its importance in modulating signal transduction that leads to cytokine production and antibody generation.
Associated diseases and disorders	FCRL5 has been implicated in the pathogenesis of autoimmune diseases and certain hematological cancers such as chronic lymphocytic leukemia (CLL). Abnormal expression or mutations of FCRL5 can dysregulate normal B cell function contributing to disease development. In CLL FCRL5 potentially interacts with proteins like leukocyte-associated immunoglobulin-like receptor 1 (LAIR1) influencing cancer cell survival and proliferation making it a target for therapeutic intervention and a potential biomarker for disease progression.

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.

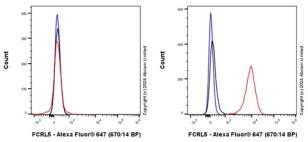
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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4 product images



Flow Cytometry - Anti-FCRL5 antibody [EPR26948-187] - BSA and Azide free (ab321969)

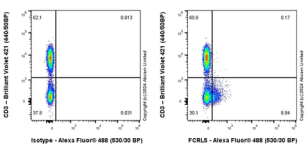
FCRL5 Flow Cytometry staining using rabbit Anti-FCRL5 antibody

This data was developed using ab321968, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of Daudi (human Burkitt's lymphoma lymphoblast) (Right) / MOLT-4 (human lymphoblastic leukemia T lymphoblast) (Left) cells labelling FCRL5 with ab321968 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® 647, ab150083) at 1/5000 dilution was used as the secondary antibody.

Negative control: MOLT-4 (PMID: 11290337).
Cross-reactivity with FCRL1 but no cross-reactivity with FCRL2, FCRL3, FCRL4 and FCRL6.



Flow Cytometry - Anti-FCRL5 antibody [EPR26948-187] - BSA and Azide free (ab321969)

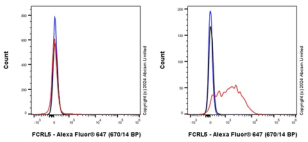
FCRL5 Flow Cytometry staining of Human PBMC (human peripheral blood mononuclear cell) using rabbit Anti-FCRL5 antibody

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Flow cytometric analysis of Human PBMC (human peripheral blood mononuclear cell) cells labelling FCRL5 with ab321968 at 1/500 dilution (0.1ug) / 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® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Cells were co-stained with anti human CD3 conjugated to Brilliant Violet 421. Gated on viable Lymphocytes.
Cross-reactivity with FCRL1 but no cross-reactivity with FCRL2, FCRL3, FCRL4 and FCRL6.



Flow Cytometry - Anti-FCRL5 antibody [EPR26948-187] - BSA and Azide free (ab321969)

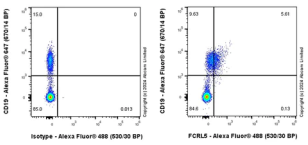
FCRL5 Flow Cytometry staining using rabbit Anti-FCRL5 antibody

This data was developed using ab321968, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of NAMALWA (human Burkitt's lymphoma B lymphocyte) (Right) / Jurkat (human T cell leukemia T lymphocyte from peripheral blood) (Left) cells labelling FCRL5 with ab321968 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® 647, ab150083) at 1/5000 dilution was used as the secondary antibody.

Negative control: Jurkat (PMID: 24504816).
Cross-reactivity with FCRL1 but no cross-reactivity with FCRL2, FCRL3, FCRL4 and FCRL6.



Flow Cytometry - Anti-FCRL5 antibody [EPR26948-187] - BSA and Azide free (ab321969)

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

Cells were co-stained with anti human CD19 conjugated to Alexa Fluor 647. Gated on viable Lymphocytes.
Cross-reactivity with FCRL1 but no cross-reactivity with FCRL2, FCRL3, FCRL4 and FCRL6.

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