abcam

ab170491

Anti-FCAMR antibody [10C4]

Key facts

Isotype	IgG2a
Host species	Mouse
Storage buffer	Preservative: 0.1% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human FCAMR. The exact immunogen used to generate this antibody is proprietary information. Database link Q8WWV6
Clone number	10C4
Purification technique	Affinity purification Protein A
Specificity	ab170491 recognizes an epitope between the EC1 and EC2 domain of Human FCAMR.
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Expected

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

ICC/IF

Expected

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

Flow Cyt

Expected

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

WB

Expected

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

Target data

See full target information FCAMR

Function	Functions as a receptor for the Fc fragment of IgA and IgM. Binds IgA and IgM with high affinity and mediates their endocytosis. May function in the immune response to microbes mediated by IgA and IgM.

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	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

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

Activity summary	The FCAMR (Fc receptor IgA IgM high affinity) is a protein that functions as a receptor for immunoglobulins IgA and IgM. It is also known by the alternate name Fcalpha/muR. FCAMR is expressed on various cells such as immune cells including B cells and macrophages and it has a molecular mass of approximately 60 kilodaltons. The receptor facilitates the binding and endocytosis of IgA and IgM primarily affecting the clearance of immune complexes and pathogens.
Biological function summary	FCAMR plays a role in the immune response by acting as part of the host defense system. It binds to IgA and IgM which are essential antibodies in mucosal immunity and systemic immune response respectively. FCAMR interacts with immune complexes possibly forming part of a larger receptor complex involved in immune signaling and regulation. Through this action FCAMR contributes to maintaining immune system balance and preventing excessive inflammation.
Pathways	FCAMR is implicated in immune regulation processes including the mucosal immune response and phagocytosis pathway. It participates alongside proteins like polymeric immunoglobulin receptor (pIgR) which also interacts with IgA. This receptor is important for the immune surveillance and clearance of antigens at mucosal surfaces. FCAMR's functional role in these pathways ensures efficient antigen removal and contributes to the body's defense mechanisms against pathogens.
Associated diseases and disorders	FCAMR associates with certain autoimmune conditions and infections such as IgA nephropathy and bacterial infections. In IgA nephropathy the receptor's interaction with IgA deposits may influence the disease's progression. Moreover FCAMR's role in bacterial infection is linked to its capacity to clear immune complexes and pathogens working in coordination with other proteins like the complement system to mediate immune defense. Understanding FCAMR's involvement in these conditions helps to reveal potential therapeutic targets for treatment.

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.

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