abcam

ab239245

FITC Anti-CD89 antibody [A59]

Anti-CD89 antibody [A59] conjugated to FITC - suitable for flow cytometry, and reacts with human samples. Clone [A59] is a mouse monoclonal antibody cited in 12 publications.

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Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	FITC
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.0975% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing FCAR protein. The exact immunogen used to generate this antibody is proprietary information. Database link P24071
Clone number	A59
Purification technique	Size-exclusion chromatography
Purification notes	Purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	4 µL for 10^6 Cells
Notes	(or 100 µl of whole blood).

Predicted

Species	Primates
Dilution info	-
Notes	-

Target data

See full target information FCAR

Function	Binds to the Fc region of immunoglobulins alpha. Mediates several functions including cytokine production.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Store in the dark

Supplementary info

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

Activity summary	CD89 also known as the Fc alpha receptor (FcαR) is a protein receptor with a molecular mass of approximately 55 to 75 kDa. It is encoded by the FCAR gene and predominantly expressed on myeloid cells such as neutrophils eosinophils monocytes and some macrophages. CD89 acts as an important component of the immune system by binding to the Fc region of immunoglobulin A (IgA) facilitating various immune responses. This receptor mediates diverse immune functions by activating cellular responses upon IgA ligand binding.

Biological function summary	CD89 plays an important role in regulating immune surveillance and response. It associates with the gamma chain of the Fc receptor complex which is necessary for its signaling ability. The binding of IgA to CD89 triggers various processes including phagocytosis antibody-dependent cellular cytotoxicity (ADCC) and the release of pro-inflammatory cytokines. These processes are fundamental for host defense against pathogens particularly those entering through mucosal surfaces where IgA is typically abundant.
Pathways	CD89 is part of the immune effector pathway and participates actively in the immunoregulatory signaling cascade. One significant pathway is the IgA-mediated immune response pathway where CD89 cooperates with other Fc receptors and integrins to clear infections. Additionally its interaction with the complement system enhances opsonization and pathogen elimination. Related proteins in these pathways include other Fc receptors like FcγR which share similar signaling mechanisms and immune functions.
Associated diseases and disorders	CD89 is associated with conditions involving dysregulated immune responses or infections. For example it is implicated in IgA nephropathy where abnormal IgA deposits in the kidneys may trigger inflammation through CD89-mediated pathways. Furthermore alterations in CD89 expression or function have been studied in the context of inflammatory bowel disease (IBD) illustrating the receptor's role in aberrant immune responses. The target’s interaction with proteins such as IgA and complement C3 provides insight into its involvement in these pathological conditions.

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

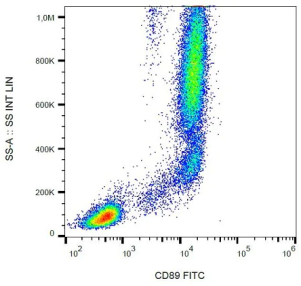
We do not recommend this combination. It is not covered by our product promise.

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:

1 product image



Flow Cytometry - FITC Anti-CD89 antibody [A59] (ab239245)

CD89 Flow Cytometry staining using mouse Anti-CD89 antibody

Flow cytometric analysis of human peripheral blood labeling CD89 with ab239245. Surface staining. Gated on leukocytes.

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