abcam

ab28335

APC Anti-NCAM1/CD56 antibody [MEM-188]

Anti-NCAM1/CD56 antibody [MEM-188] conjugated to APC - suitable for flow cytometry, and reacts with human samples. Clone [MEM-188] is a mouse monoclonal antibody cited in 54 publications.

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Key facts

Isotype	IgG2a
Host species	Mouse
Conjugation	APC
Excitation/Emission	Ex: 650nm, Em: 660nm
Storage buffer	pH: 7.4 Preservative: 0.097% Sodium azide Constituents: PBS, 0.2% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing NCAM1 protein. The exact immunogen used to generate this antibody is proprietary information. Database link P13591
Clone number	MEM-188
Purification technique	Size-exclusion chromatography
Specificity	ab28335 recognises an isoform of NCAM characteristic for leucocytes.Reactivity with other NCAM isoforms has not been tested.
Light chain type	kappa
Purification notes	Purity >95% by SDS-PAGE.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	Use 10 ul per 100 ul of whole blood. ab91364 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Target data

See full target information NCAM1/CD56

Function	This protein is a cell adhesion molecule involved in neuron-neuron adhesion, neurite fasciculation, outgrowth of neurites, etc. (Microbial infection) Acts as a receptor for rabies virus. (Microbial infection) Acts as a receptor for Zika virus.

Storage

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

Supplementary info

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

Activity summary	NCAM1 also known as Neural Cell Adhesion Molecule 1 or CD56 is an important cell surface glycoprotein that plays a role in cell-cell adhesion. It has a molecular mass of approximately 120-140 kDa. NCAM1 is widely expressed in various tissues including the nervous system skeletal muscle and certain hematopoietic cells. In flow cytometry and immunohistochemistry NCAM1's expression is extensively studied to track and analyze cell populations using techniques like NCAM1 ELISA for quantification.
Biological function summary	NCAM1 influences neuronal growth survival and synaptic plasticity. This protein is part of the immunoglobulin superfamily and contributes to dynamic interactions during development. NCAM1 exists on cell membranes assisting in the formation and maintenance of tissue structures. In particular cell adhesion molecule CAL53 interacts with NCAM1 highlighting its involvement in synaptic connections. Additionally NCAM1 impacts cellular migration and differentiation particularly in myogenic processes involving MY31's pathway.

Pathways	The NCAM1 protein participates in the MAPK signaling pathway and the PI3K/AKT pathway both essential in cellular growth and survival. NCAM1 acts alongside ERIC1 aiding in the transduction of signals that regulate cytoskeletal rearrangement. These pathways influence cellular communication and responses to external stimuli further enhancing tissue development and regeneration mechanisms.
Associated diseases and disorders	NCAM1 is associated with neurodegenerative conditions like Alzheimer's disease and certain types of cancer including neuroblastoma. Changes in NCAM1 expression or function can disrupt normal cell adhesion and signaling leading to pathological states. The protein's interaction with cell surface markers such as CD56 mouse marker helps in the diagnosis and therapy of these disorders providing potential therapeutic targets or biomarkers for clinical applications.

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

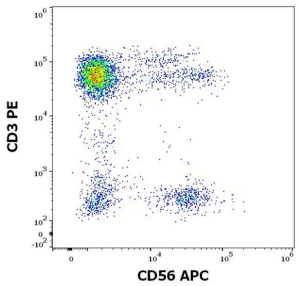
We do not recommend this combination. It is not covered by our product promise.

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.

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Terms & Conditions.

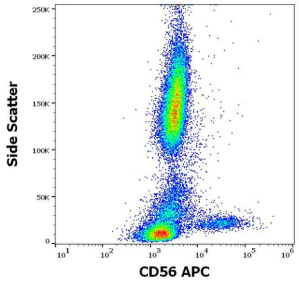
3 product images



Flow Cytometry - APC Anti-NCAM1/CD56 antibody [MEM-188] (ab28335)

NCAM1/CD56 Flow Cytometry staining using mouse Anti-NCAM1/CD56 antibody

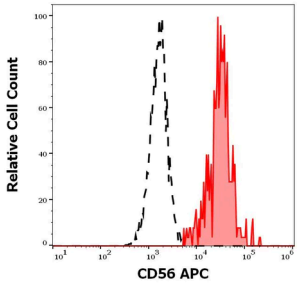
Flow cytometry multicolor surface staining pattern of human lymphocytes stained using anti-human CD3 (UCHT1) PE antibody (10 µl reagent / 100 µl of peripheral whole blood) and ab28335 (10 µl reagent / 100 µl of peripheral whole blood).



Flow Cytometry - APC Anti-NCAM1/CD56 antibody [MEM-188] (ab28335)

NCAM1/CD56 Flow Cytometry staining using mouse Anti-NCAM1/CD56 antibody

Flow cytometry surface staining pattern of human peripheral whole blood stained using ab28335 (10 µl reagent / 100 µl of peripheral whole blood).



Flow Cytometry - APC Anti-NCAM1/CD56 antibody [MEM-188] (ab28335)

NCAM1/CD56 Flow Cytometry staining using mouse Anti-NCAM1/CD56 antibody

Separation of human CD56 positive CD3 negative NK cells (red-filled) from CD56 negative CD3 positive T cells (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using ab28335 (10 µl reagent / 100 µl of peripheral whole blood).

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