abcam

ab237383

APC Anti-NCAM1/CD56 antibody [EPR21827]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	APC
Excitation/Emission	Ex: 650nm, Em: 660nm
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	EPR21827
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	Mouse
Dilution info	1/500

Notes	-

Expected

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

ICC/IF

Tested

Species	Mouse
Dilution info	1/100
Notes	-

Expected

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

IHC-P

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

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.

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	Do Not Freeze, 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	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

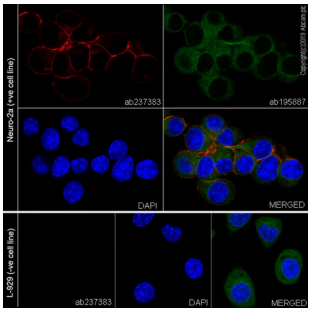
We do not recommend this combination. It is not covered by our product promise.

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.

Full details and terms and conditions can be found here:
Terms & Conditions.

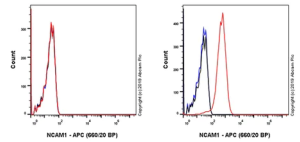
2 product images



Immunocytochemistry/ Immunofluorescence - APC Anti-NCAM1/CD56 antibody [EPR21827] (ab237383)

NCAM1/CD56 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-NCAM1/CD56 antibody

Immunofluorescent analysis of 100% methanol-fixed Neuro2a (Mouse neuroblastoma cell line) cells labeling NCAM1 with ab237383 at 1/100 dilution (5 µg/ml), followed by ab195887 anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 488) (green). The nuclear counterstain is DAPI (blue).
Negative control: L-929 cells.



Flow Cytometry - APC Anti-NCAM1/CD56 antibody [EPR21827] (ab237383)

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

Flow cytometric analysis of L-929 (Mouse connective tissue fibroblast cell line, Left) / Neuro2a (Mouse neuroblastoma cell line, Right) labeling NCAM1 with ab237383 at 1/500 dilution (red) compared with ab232814 Rabbit IgG, monoclonal [EPR25A] - Isotype Control - Allophycocyanin (Black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue).
Negative control: L-929 cells.

Gated on viable cells.

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