abcam

Product datasheet

Anti-NCAM1 antibody [123C3] ab9272

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Overview

Product name Anti-NCAM1 antibody [123C3]

Description Mouse monoclonal [123C3] to NCAM1

Host species Mouse

Specificity

This antibody stains neural cell adhesion molecule (NCAM) which is present in small cell lung

cancer and lung carcinoids. It also reacts with a number of non-small cell lung carcinomas and neuroendocrine and neuronal derived tissues. In addition, it is internalized after binding to its antigen on SCLC cell lines, making it an excellent reagent for tumor imaging in xenograft models.

ab9272 reacts with all three isoforms of NCAM.

Tested applications Suitable for: IHC-FrFI, IHC-Fr, Flow Cyt, ICC/IF

Species reactivity Reacts with: Rat, Human, Zebrafish

Immunogen Tissue, cells or virus corresponding to Human NCAM1. This antibody was raised against a small

cell lung carcinoma specimen.

Epitope This antibody recognizes an epitope in the NCAM exons 11-13 which is dependent on an intact

conformation of the first fibronectin type-III homologous domain encoded by these exons.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.3

Preservative: 0.02% Sodium azide Constituents: PBS, 0.1% BSA

Purity Protein G purified

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Clonality Monoclonal
Clone number 123C3

Myeloma unknown

Isotype IgG1

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab9272 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-FrFI		Use at an assay dependent concentration.
IHC-Fr	★ ★ ★ ★ ★ (1)	1/500 - 1/1000.
Flow Cyt		Use 1µg for 10 ⁶ cells. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		1/1000.

Target

Function This protein is a cell adhesion molecule involved in neuron-neuron adhesion, neurite fasciculation,

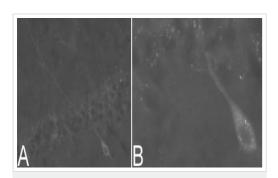
outgrowth of neurites, etc.

Sequence similaritiesContains 2 fibronectin type-III domains.

Contains 5 lg-like C2-type (immunoglobulin-like) domains.

Cellular localization Secreted and Cell membrane.

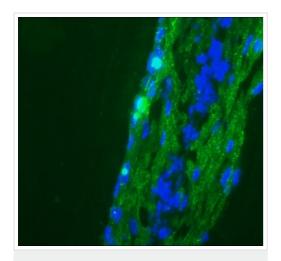
Images



Immunohistochemistry - Free Floating - Anti-NCAM1 antibody [123C3] (ab9272)

ab9272 at a dilution of 1/1000, staining NCAM (Alexa 488 secondary at 1/2000) on rat brain tissue (30µm thick coronal sections) in free floating IHC (see protocol link for detailed description). Images showing hippocampal neuron body and processes: [A] 20x objective and [B] punctate cytoplasmic staining; 40x objective. No labeling observed following omission of primary antibody.

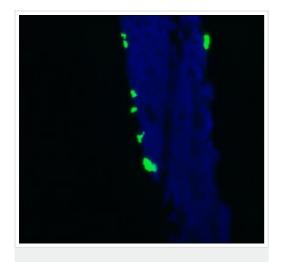
Sections were viewed using an Axioplan 2 Imaging microscope (Imaging Associates) fitted with 10x, 20x and 40x Plan-Neofluorobjectives (Zeiss, Germany) and images were taken using a AxioCam Hrm digital camera (Zeiss, Germany) and AxioVision software (Imaging Associates).



Immunohistochemistry (Frozen sections) - Anti-NCAM1 antibody [123C3] (ab9272)

Immunofluorescence staining images of 9 day old zebrafish embryos.

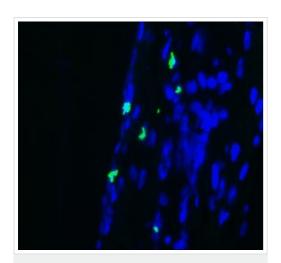
ab9272 reacts with developing neuronal tissue (strong) and muscle. Frozen sample treated with Acetone:Methanol 1:1, antibody diluted 1/100 and incubated for 45 minutes at room temperature.



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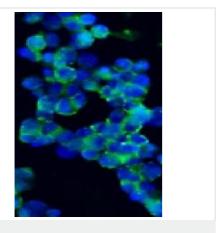
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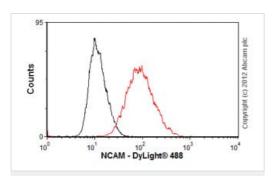
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Immunocytochemistry/ Immunofluorescence - Anti-NCAM1 antibody [123C3] (ab9272)

Immunostaining of the neural cell adhesion molecule (NCAM) in small cell human lung cancer cell line NCI-H82.



Flow Cytometry - Anti-NCAM1 antibody [123C3] (ab9272)

Overlay histogram showing SH-SY5Y cells stained with ab9272 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab9272, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in SH-SY5Y cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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