

## Product datasheet

# Anti-NCAM1 antibody [EPR21827] - BSA and Azide free ab231826

Recombinant RabMAb

8 Images

### Overview

<b>Product name</b>	Anti-NCAM1 antibody [EPR21827] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR21827] to NCAM1 - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF, IP, Flow Cyt, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Mouse stomach tissue.
<b>General notes</b>	<p>ab231826 is the carrier-free version of <a href="#">ab220360</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

## Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR21827
<b>Isotype</b>	IgG

## Applications

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**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab231826 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
<b>WB</b>		Use at an assay dependent concentration. Detects a band of approximately 120-200 kDa (predicted molecular weight: 95 kDa).
<b>ICC/IF</b>		Use at an assay dependent concentration.
<b>IP</b>		Use at an assay dependent concentration.
<b>Flow Cyt</b>		Use at an assay dependent concentration.
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

## Target

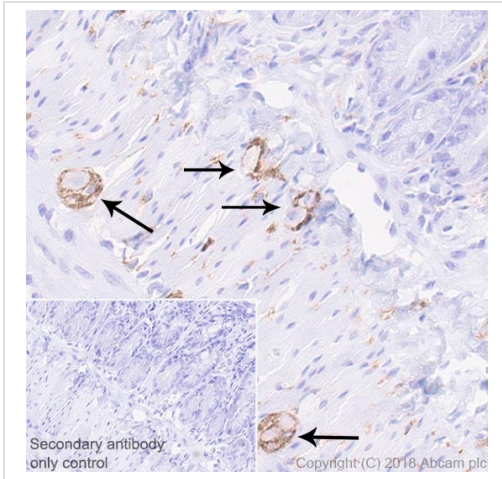
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<b>Function</b>	This protein is a cell adhesion molecule involved in neuron-neuron adhesion, neurite fasciculation, outgrowth of neurites, etc.
<b>Sequence similarities</b>	Contains 2 fibronectin type-III domains. Contains 5 Ig-like C2-type (immunoglobulin-like) domains.
<b>Cellular localization</b>	Secreted and Cell membrane.

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## Images

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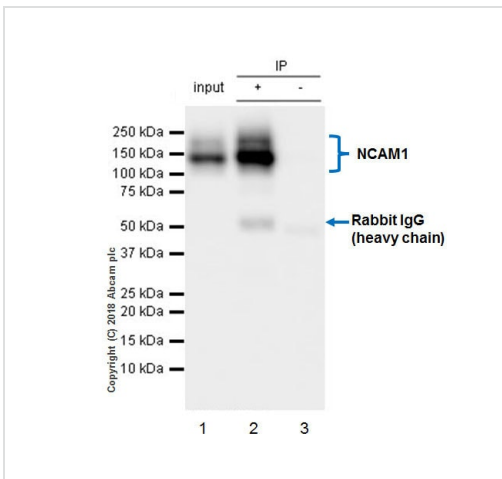
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NCAM1 antibody [EPR21827] - BSA and Azide free (ab231826)

Immunohistochemical analysis of paraffin-embedded rat colon tissue labeling NCAM1 with **ab220360** at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), Ready to use. Positive staining of ganglia (arrows) in rat colon (PMID: 1705171). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rab it IgG H&L (HRP), Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab220360**).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-NCAM1 antibody [EPR21827] - BSA and Azide free (ab231826)

NCAM1 was immunoprecipitated from 0.35 mg of rat brain lysate with **ab220360** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab220360** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Lane 1: Rat brain lysate 10 µg (Input).

Lane 2: **ab220360** IP in rat brain lysate.

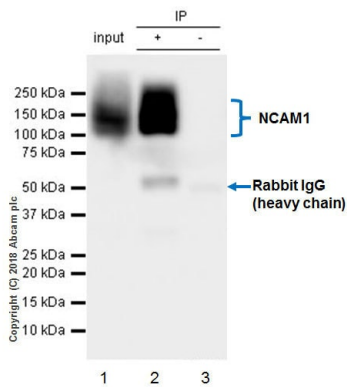
Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab220360** in rat brain lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 1 second.

The 120,140 and 180kDa bands are different isoforms as reported in the literature (PMID: 26288071).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab220360**).



Immunoprecipitation - Anti-NCAM1 antibody  
[EPR21827] - BSA and Azide free (ab231826)

NCAM1 was immunoprecipitated from 0.35 mg of mouse brain lysate with **ab220360** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab220360** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Lane 1: Mouse brain lysate 10 µg (Input).

Lane 2: **ab220360** IP in mouse brain lysate.

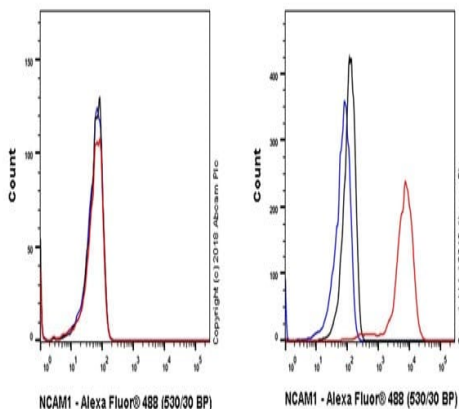
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This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab220360**).

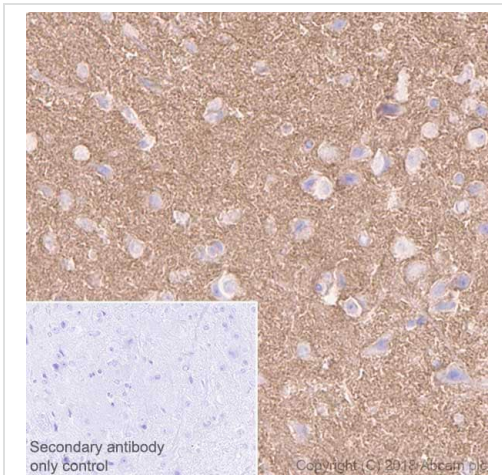


Flow Cytometry - Anti-NCAM1 antibody [EPR21827]  
- BSA and Azide free (ab231826)

Flow cytometric analysis of L-929 (mouse connective tissue fibroblast cell line) cell line (left panel) and Neuro-2a (mouse neuroblastoma cell line) cell line (right panel) labeling NCAM1 with **ab220360** at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells. **Negative control:** L-929.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab220360**).



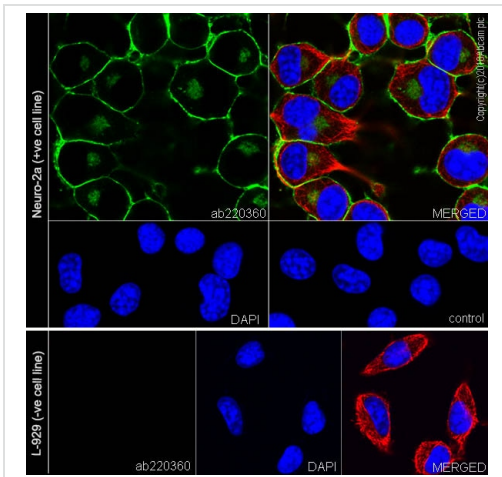
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NCAM1 antibody [EPR21827] - BSA and Azide free (ab231826)

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling NCAM1 with **ab220360** at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), Ready to use. Positive staining on mouse cerebrum (PMID: 1705171). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP), Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab220360**).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-NCAM1 antibody [EPR21827] - BSA and Azide free (ab231826)

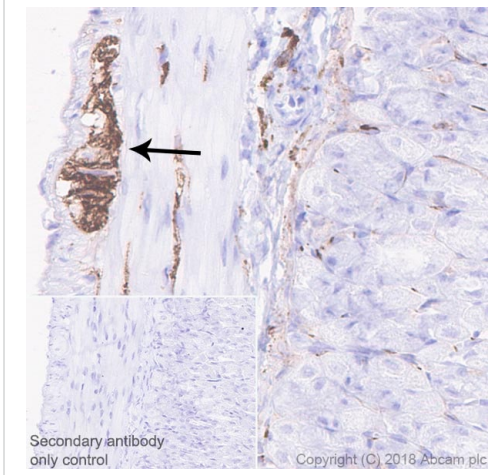
Immunofluorescent analysis of 100% methanol-fixed, 0.1% Triton X-100 permeabilized Neuro-2a (mouse neuroblastoma cell line) cells labeling NCAM1 with **ab220360** at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining in Neuro-2a cell line.

**Negative control:** L-929 PMID: 9696812).

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab220360**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NCAM1 antibody [EPR21827] - BSA and Azide free (ab231826)





Immunohistochemical analysis of paraffin-embedded mouse stomach tissue labeling NCAM1 with **ab220360** at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), Ready to use. Positive staining of ganglion (arrow) in mouse stomach (PMID: 1705171). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP), Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab220360**).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-NCAM1 antibody [EPR21827] - BSA and Azide free (ab231826)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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