

Anti-Neurogranin antibody [Ng2] - BSA and Azide free ab273464

Recombinant

6 Images

Overview

Product name	Anti-Neurogranin antibody [Ng2] - BSA and Azide free
Description	Mouse monoclonal [Ng2] to Neurogranin - BSA and Azide free
Host species	Mouse
Tested applications	Suitable for: IP, IHC-P, WB Unsuitable for: ICC/IF or IHC-Fr
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is considered to be commercially sensitive.
Positive control	WB: Human brain tissue lysate; Mouse hippocampus tissue lysate; Rat hippocampus tissue lysate. IHC-P: Human, mouse and rat cerebrum tissue. IP: Mouse hippocampus tissue lysate.
General notes	<p>ab273464 is the carrier-free version of ab273443.</p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>Our carrier-free 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 conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <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[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] 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">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production

For more information [see here](#).

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	Constituent: 100% PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	Ng2
Isotype	IgG2b

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab273464 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

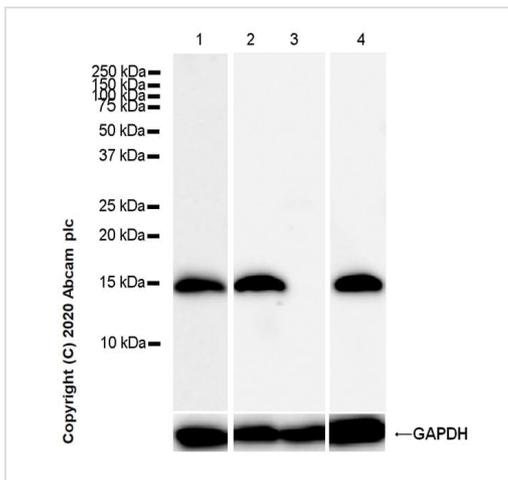
Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 15 kDa (predicted molecular weight: 8 kDa).

Application notes Is unsuitable for ICC/IF or IHC-Fr.

Target

Function	Acts as a "third messenger" substrate of protein kinase C-mediated molecular cascades during synaptic development and remodeling. Binds to calmodulin in the absence of calcium.
Tissue specificity	In the cerebral cortex, found in the cell bodies of neurons in layers II-VI, and in apical and basal dendrites of pyramidal neurons. Is not found in the dendrites in patients with Alzheimer disease.
Sequence similarities	Belongs to the neurogranin family. Contains 1 collagen-like domain. Contains 1 IQ domain.

Images



Western blot - Anti-Neurogranin antibody [Ng2] - BSA and Azide free (ab273464)

All lanes : Anti-Neurogranin antibody [Ng2] ([ab273443](#)) at 1/1000 dilution

Lane 1 : Human brain tissue lysate

Lane 2 : Mouse hippocampus tissue lysate

Lane 3 : Mouse spleen tissue lysate

Lane 4 : Rat hippocampus tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/10000 dilution

Predicted band size: 8 kDa

Observed band size: 15 kDa

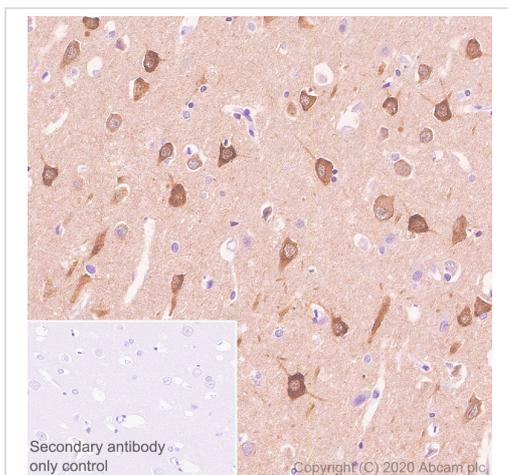
This data was developed using [ab273443](#), the same antibody clone in a different buffer formulation.

Negative control: Mouse spleen (PMID: 20665622).

The molecular weight observed is consistent with what has been described in the literature (PMID: 20875798).

Blocking/Dilution buffer: 5% NFD/MTBST.

Exposure times: Lane 1: 10 secs; Lanes 2-4: 3 secs.



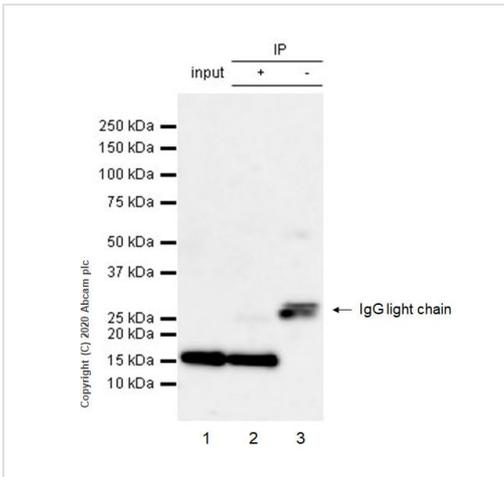
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurogranin antibody [Ng2] - BSA and Azide free (ab273464)

This data was developed using [ab273443](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded human cerebrum tissue labeling Neurogranin with [ab273443](#) at 1/20000 dilution (0.053µg/ml) followed by a ready to use Goat Anti-Mouse IgG H&L (HRP polymer) ([ab214879](#)). Positive staining on human cerebrum tissue is observed. The section was incubated with [ab273443](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use Goat Anti-Mouse IgG H&L (HRP polymer) ([ab214879](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 10 mins.



Immunoprecipitation - Anti-Neurogranin antibody
[Ng2] - BSA and Azide free (ab273464)

This data was developed using [ab273443](#), the same antibody clone in a different buffer formulation.

Neurogranin was immunoprecipitated from 0.35 mg mouse hippocampus tissue lysate with [ab273443](#) at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using [ab273443](#) at 1/1000 dilution. Mouse IgG for IP (HRP) ([ab131368](#)) was used at 1/10000 dilution.

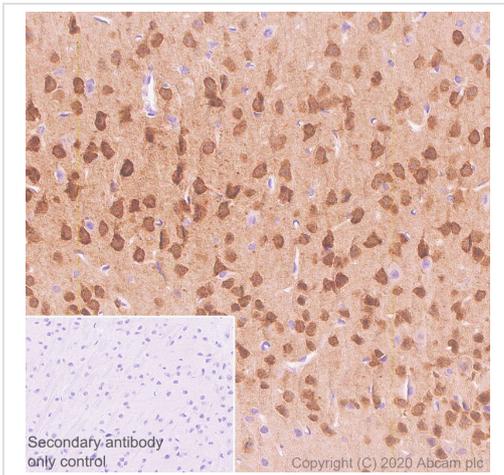
Lane 1: Mouse hippocampus tissue lysate 10µg.

Lane 2: [ab273443](#) IP in mouse hippocampus tissue lysate.

Lane 3: Mouse monoclonal IgG2b instead of [ab273443](#) in Mouse hippocampus tissue lysate.

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

Exposure time: 58 seconds.



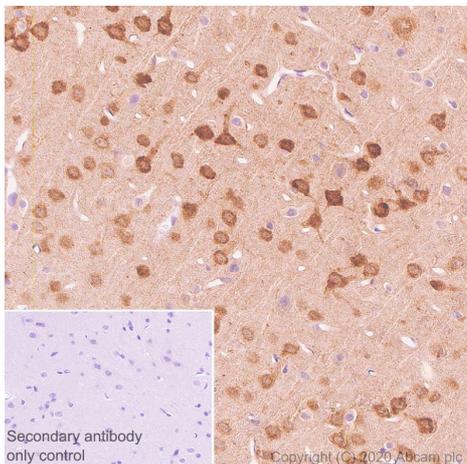
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurogranin antibody
[Ng2] - BSA and Azide free (ab273464)

This data was developed using [ab273443](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling Neurogranin with [ab273443](#) at 1/20000 dilution (0.053µg/ml) followed by a ready to use Goat Anti-Mouse IgG H&L (HRP polymer) ([ab214879](#)). Positive staining on mouse cerebrum tissue is observed. The section was incubated with [ab273443](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use Goat Anti-Mouse IgG H&L (HRP polymer) ([ab214879](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 10 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurogranin antibody [Ng2] - BSA and Azide free (ab273464)

This data was developed using [ab273443](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded rat cerebrum tissue labeling Neurogranin with [ab273443](#) at 1/20000 dilution (0.053µg/ml) followed by a ready to use Goat Anti-Mouse IgG H&L (HRP polymer) ([ab214879](#)). Positive staining on rat cerebrum tissue is observed. The section was incubated with [ab273443](#) for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is ready to use Goat Anti-Mouse IgG H&L (HRP polymer) ([ab214879](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 10 mins.

Why choose a recombinant antibody?

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

Anti-Neurogranin antibody [Ng2] - BSA and Azide free (ab273464)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors