

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

Recombinant

6 Images

### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-Neurogranin antibody [Ng2] - BSA and Azide free  |
| <b>Description</b>         | Mouse monoclonal [Ng2] to Neurogranin - BSA and Azide free  |
| <b>Host species</b>        | Mouse   |
| <b>Tested applications</b> | <b>Suitable for:</b> IP, IHC-P, WB<br><b>Unsuitable for:</b> ICC/IF or IHC-Fr   |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Mouse, Rat, Human   |
| <b>Immunogen</b>           | Synthetic peptide. This information is considered to be commercially sensitive.   |
| <b>Positive control</b>    | WB: Human brain tissue lysate; Mouse hippocampus tissue lysate; Rat hippocampus tissue lysate.<br>IHC-P: Human, mouse and rat cerebrum tissue. IP: Mouse hippocampus tissue lysate.   |
| <b>General notes</b>       | <p>ab273464 is the carrier-free version of <a href="#">ab273443</a>.</p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</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> |

For more information [see here](#).

## 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>       | Constituent: 100% PBS                         |
| <b>Carrier free</b>         | Yes   |
| <b>Purity</b>               | Protein A purified                            |
| <b>Clonality</b>            | Monoclonal                                    |
| <b>Clone number</b>         | Ng2   |
| <b>Isotype</b>              | IgG2b   |

## Applications

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**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.

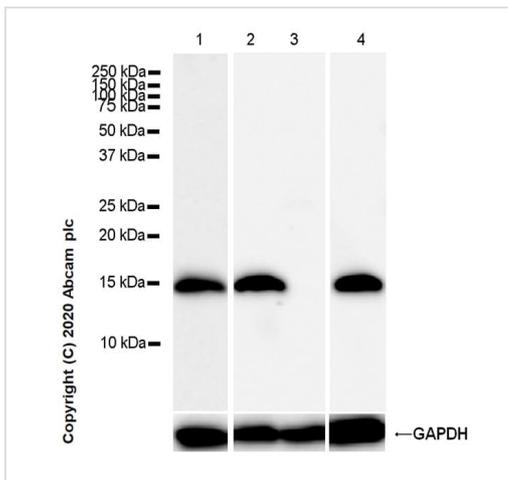
## Target

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|                              |  |
|------------------------------|--|
| <b>Function</b>              | 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.                       |
| <b>Tissue specificity</b>    | 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. |
| <b>Sequence similarities</b> | Belongs to the neurogranin family.<br>Contains 1 collagen-like domain.<br>Contains 1 IQ domain.  |

## Images

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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

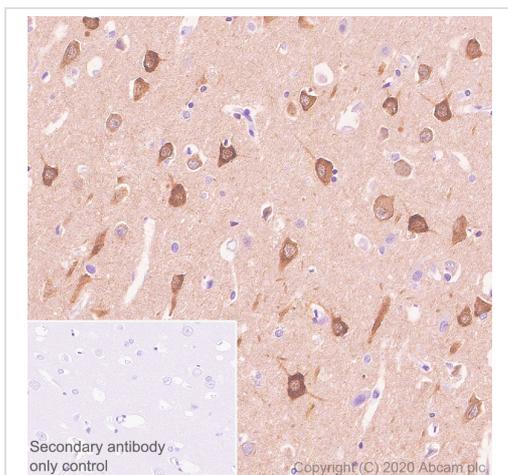
This data was developed using [ab273443](#), the same antibody clone in a different buffer formulation.

**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.



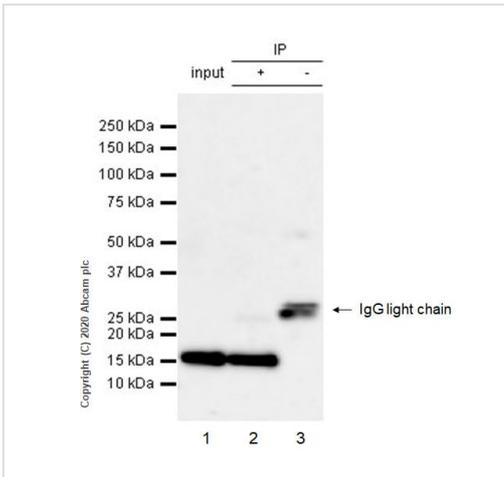
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurogranin antibody [Ng2] - BSA and Azide free (ab273464)

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.

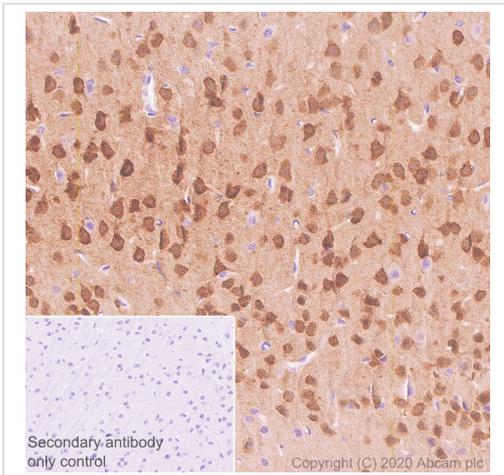
**Lane 1:** Mouse hippocampus tissue lysate 10µg.

**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.



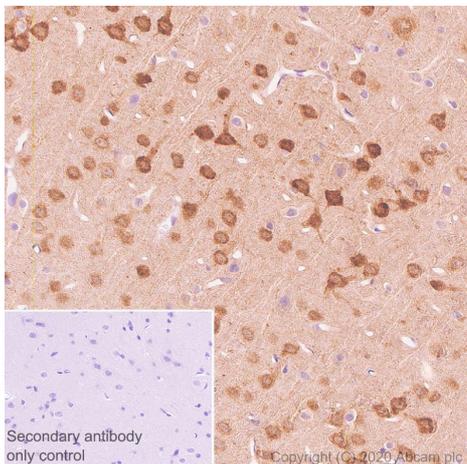
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurogranin antibody  
[Ng2] - BSA and Azide free (ab273464)

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

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