

Product datasheet

Anti-BIII antibody [EPR25384-127] ab288155

Recombinant RabMAb

4 Images

Overview

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|----------------------------|--|
| Product name | Anti-BIII antibody [EPR25384-127] |
| Description | Rabbit monoclonal [EPR25384-127] to BIII |
| Host species | Rabbit |
| Tested applications | Suitable for: IHC-P, WB Unsuitable for: Flow Cyt (Intra), ICC/IF, IHC-Fr or IP |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | WB: Mouse brain, Mouse hippocampus, Rat brain, Rat hippocampus and Human cerebellum lysates. IHC-P: Mouse cerebrum tissue. |
| General notes | <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 <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> |

Properties

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|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. |
| Storage buffer | pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR25384-127 |

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab288155 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-P | | 1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Unsuitable with Rat and Human. |
| WB | | 1/1000. Detects a band of approximately 75-150 kDa (predicted molecular weight: 262 kDa). |

Application notes Is unsuitable for Flow Cyt (Intra), ICC/IF, IHC-Fr or IP.

Target

Function Voltage-sensitive calcium channels (VSCC) mediate the entry of calcium ions into excitable cells and are also involved in a variety of calcium-dependent processes, including muscle contraction, hormone or neurotransmitter release, gene expression, cell motility, cell division and cell death. The isoform alpha-1B gives rise to N-type calcium currents. N-type calcium channels belong to the 'high-voltage activated' (HVA) group and are blocked by omega-conotoxin-GVIA (omega-CTX-GVIA) and by omega-agatoxin-IIIa (omega-Aga-IIIa). They are however insensitive to dihydropyridines (DHP), and omega-agatoxin-IVA (omega-Aga-IVA). Calcium channels containing alpha-1B subunit may play a role in directed migration of immature neurons.

Tissue specificity Isoform Alpha-1b-1 and isoform Alpha-1b-2 are expressed in the central nervous system, but not in skeletal muscle or aorta.

Involvement in disease Dystonia 23

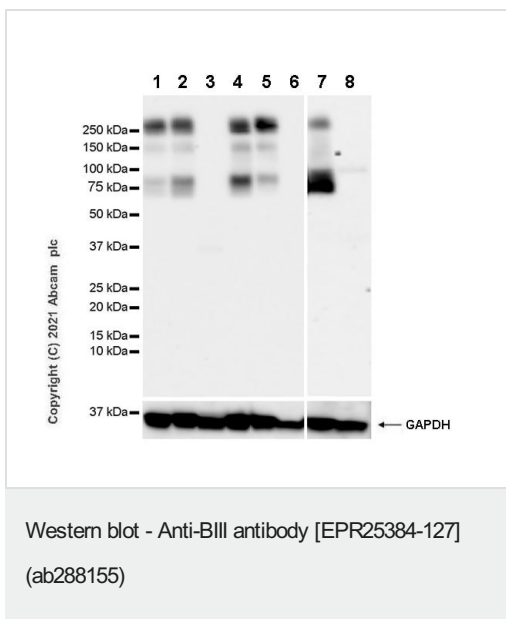
Sequence similarities Belongs to the calcium channel alpha-1 subunit (TC 1.A.1.11) family. CACNA1B subfamily. Contains 1 EF-hand domain.

Domain Each of the four internal repeats contains five hydrophobic transmembrane segments (S1, S2, S3, S5, S6) and one positively charged transmembrane segment (S4). S4 segments probably represent the voltage-sensor and are characterized by a series of positively charged amino acids at every third position.

Post-translational modifications Phosphorylated in vitro by CaM-kinase II, PKA, PKC and CGPK.

Cellular localization Membrane.

Images



All lanes : Anti-BIII antibody [EPR25384-127] (ab288155) at 1/1000 dilution

Lane 1 : Mouse brain tissue lysate at 20 µg

Lane 2 : Mouse hippocampus tissue lysate at 20 µg

Lane 3 : Mouse liver tissue lysate at 40 µg

Lane 4 : Rat brain tissue lysate at 20 µg

Lane 5 : Rat hippocampus tissue lysate at 20 µg

Lane 6 : Rat liver tissue lysate at 40 µg

Lane 7 : Human cerebellum tissue lysate at 20 µg

Lane 8 : Human liver tissue lysate at 40 µg

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 262 kDa

Observed band size: 262,75-150 kDa

Blocking and diluting buffer and concentration: 5% NFD/MTBST

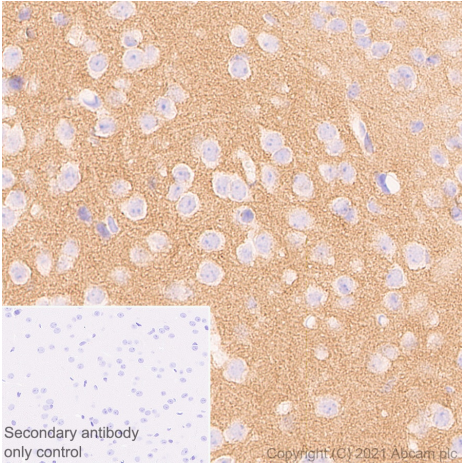
Bis-Tris gel was used for this blot.

Samples are non-boiled as boiling may cause protein aggregates.

The lower bands (75-150kda) may represent different isoforms or proteolytic fragments according to one new study on KO mice (PMID:34353899).

Negative control: liver

Exposure time: Lanes 1-6: 37 seconds Lanes 7-8: 81 seconds

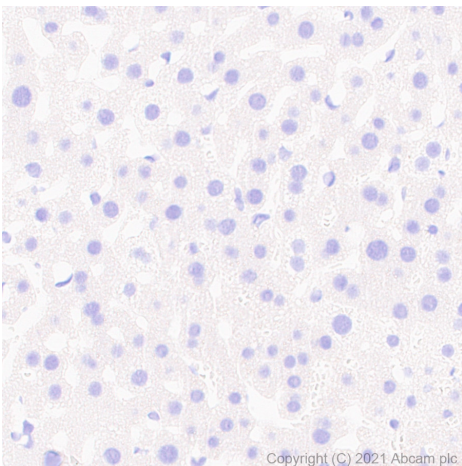


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BIII antibody [EPR25384-127] (ab288155)

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labelling BIII with ab288155 at 1/100 (4.84 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Cytoplasmic staining in mouse cerebrum. The section was incubated with ab288155 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 a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BIII antibody [EPR25384-127] (ab288155)

Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labelling BIII with ab288155 at 1/100 (4.84 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).





Negative control: No staining in mouse liver. The section was incubated with ab288155 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 a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Why choose a recombinant antibody?

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|--|--|
|  <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-B111 antibody [EPR25384-127] (ab288155)

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

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