abcam

Product datasheet

Anti-BIN1 antibody [EPR13463-25] ab185950





★★★★★ 3 Abreviews 6 References 8 Images

Overview

Product name Anti-BIN1 antibody [EPR13463-25]

Description Rabbit monoclonal [EPR13463-25] to BIN1

Host species Rabbit

Tested applications Suitable for: ICC/IF, WB, IHC-P, Flow Cyt (Intra)

Species reactivity Reacts with: Mouse, Human

Predicted to work with: Rat

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control U87-MG, Human fetal kidney and HeLa whole cell lysate (ab150035); Human fetal brain lysate;

Human skeletal muscle and mouse brain tissues; HeLa and U87-MG cells.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

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 long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number EPR13463-25

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab185950 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
ICC/IF		1/100.
WB	★★★★	1/1000. Detects a band of approximately 56, 65, 70, 90 kDa (predicted molecular weight: 65 kDa).
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		1/90. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

Target	•
--------	---

Function

May be involved in regulation of synaptic vesicle endocytosis. May act as a tumor suppressor and

inhibits malignant cell transformation.

Tissue specificity

Ubiquitous. Highest expression in the brain and muscle. Isoform IIA is expressed only in the brain where it is concentrated in axon initial segments and nodes of Ranvier. Isoform BIN1 is widely expressed with highest expression in skeletal muscle.

Involvement in disease

Defects in BIN1 are the cause of centronuclear myopathy autosomal recessive (ARCNM) [MIM:255200]; also known as autosomal recessive myotubular myopathy. Centronuclear myopathies are congenital muscle disorders characterized by progressive muscular weakness and wasting involving mainly limb girdle, trunk, and neck muscles. It may also affect distal muscles. Weakness may be present during childhood or adolescence or may not become evident until the third decade of life. Ptosis is a frequent clinical feature. The most prominent histopathologic features include high frequency of centrally located nuclei in muscle fibers not secondary to regeneration, radial arrangement of sarcoplasmic strands around the central nuclei, and predominance and hypotrophy of type 1 fibers.

Sequence similarities

Contains 1 BAR domain.
Contains 1 SH3 domain.

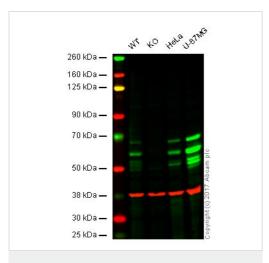
Post-translational modifications

Phosphorylated by protein kinase C.

Cellular localization

Cytoplasm and Nucleus.

Images



Western blot - Anti-BIN1 antibody [EPR13463-25] (ab185950)



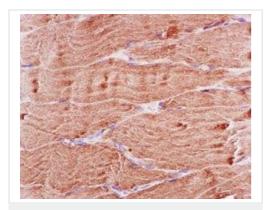
Lane 2: BIN1 knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: U-87MG whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab185950 observed at 45-65 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

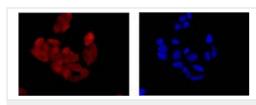
ab185950 was shown to specifically react with BIN1 when BIN1 knockout samples were used. Wild-type and BIN1 knockout samples were subjected to SDS-PAGE. Ab185950 and **ab8245** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1 µg/ml and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-BIN1 antibody
[EPR13463-25] (ab185950)

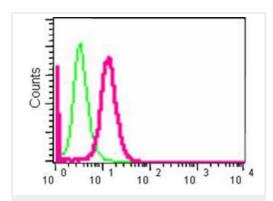
Immunohistochemical analysis of paraffin-embedded Human skeletal muscle tissue labeling BIN1 with ab185950 at 1/100 dilution. Secondary ab: Ready to use HRP Polymer for Rabbit IgG. Counter stain: Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



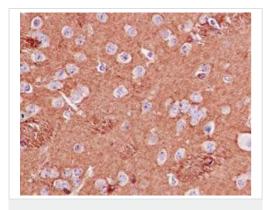
Immunocytochemistry/ Immunofluorescence - Anti-BIN1 antibody [EPR13463-25] (ab185950)

Immunofluorescent analysis of HeLa cells labeling BIN1 with ab185950 at 1/100 dilution. Secondary ab: Goat anti rabbit IgG (Alexa Fluor®555) at 1/200 dilution. Fixative: -20**I** Acetone. Counter stain: Dapi (blue).



Flow Cytometry (Intracellular) - Anti-BIN1 antibody [EPR13463-25] (ab185950)

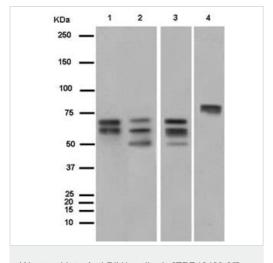
Intracellular flow cytometric analysis ofHela cells labeling BIN1 using ab185950 at 1/90 dilution (red). Secondary ab: Goat anti rabbit lgG (FITC) at 1/150 dilution. Fixative: 2% paraformaldehyde. Isotype control: Rabbit monoclonal lgG (green).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-BIN1 antibody
[EPR13463-25] (ab185950)

Immunohistochemical analysis of paraffin-embedded Mouse brain tissue labeling BIN1 with ab185950 at 1/100 dilution. Secondary ab: Ready to use HRP Polymer for Rabbit IgG. Counter stain: Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Western blot - Anti-BIN1 antibody [EPR13463-25] (ab185950)

All lanes : Anti-BIN1 antibody [EPR13463-25] (ab185950) at 1/1000 dilution

Lane 1: U87-MG cell lysate

Lane 2: Human fetal kidney lysate

Lane 3: Hela cell lysate

Lane 4: Human fetal brain lysate

Lysates/proteins at 10 µg per lane.

Secondary

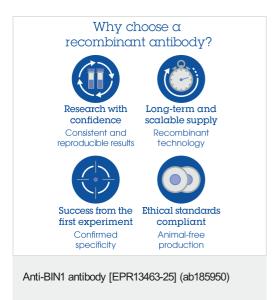
All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 65 kDa

Blocking buffer: 5% NFDM/TBST

Immunocytochemistry/ Immunofluorescence - Anti-BIN1 antibody [EPR13463-25] (ab185950)

Immunofluorescent analysis of U87-MG cells labeling BIN1 with ab185950 at 1/100 dilution. Secondary ab: Goat anti rabbit lgG (Alexa Fluor®555) at 1/200 dilution. Fixative: 4% paraformaldehyde. Counter stain: Dapi (blue)



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