abcam

Product datasheet

Anti-NEAS antibody [EPR3017] ab75755

Recombinant RabMAb

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Overview

Product name	Anti-NEAS antibody [EPR3017]
Description	Rabbit monoclonal [EPR3017] to NEAS
Host species	Rabbit
Tested applications	**Suitable for:** WB **Unsuitable for:** Flow Cyt,IHC-P or IP
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Rat
Immunogen	Synthetic peptide within Human NEAS aa 2450-2550. The exact sequence is proprietary.
Positive control	WB: HeLa lysates, untreated and treated with Camptothecin; Jurkat whole cell lysate (**ab7899**), untreated and treated with Staurosporine; TF-1, SH-SY5Y and human brain lysate, treated and untreated HeLA and parental HAP1 whole cell lysates
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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% PBS
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR3017
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab75755 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
WB	★★★★★ **(3)**	1/500 - 1/2000. Detects a band of approximately 285 kDa (predicted molecular weight: 285 kDa).

Application notes Is unsuitable for Flow Cyt,IHC-P or IP.

Target

Function Fodrin, which seems to be involved in secretion, interacts with calmodulin in a calcium-dependent manner and is thus candidate for the calcium-dependent movement of the cytoskeleton at the membrane.

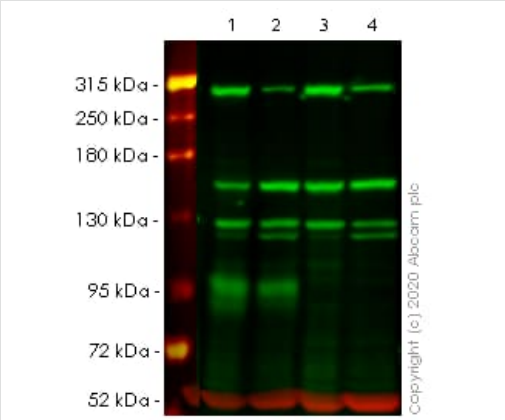
Involvement in disease Defects in SPTAN1 are the cause of epileptic encephalopathy early infantile type 5 (EIEE5) [MIM:613477]. EIEE5 is a disorder characterized by seizures associated with hypsarrhythmia profound mental retardation with lack of visual attention and speech development, as well as spastic quadriplegia.

Sequence similarities Belongs to the spectrin family.
Contains 3 EF-hand domains.
Contains 1 SH3 domain.
Contains 23 spectrin repeats.

Post-translational modifications Phosphorylation of Tyr-1176 decreases sensitivity to cleavage by calpain in vitro.

Cellular localization Cytoplasm > cytoskeleton. Cytoplasm > cell cortex. Expressed along the cell membrane in podocytes and presumptive tubule cells during glomerulogenesis and is expressed along lateral cell margins in tubule cells.

Images



Western blot - Anti-NEAS antibody [EPR3017] (ab75755)

All lanes : Anti-NEAS antibody [EPR3017] (ab75755) at 1/1000 dilution

Lane 1 : Untreated HeLa (Human cervix adenocarcinoma epithelial cell), whole cell lysate
Lane 2 : HeLa, treated with 1 µM Staurosporine for 3 hours, whole cell lysate
Lane 3 : Untreated parental HAP1 (Wildtype control Human chronic myelogenous leukemia near-haploid cell line), whole cell lysate
Lane 4 : parental HAP1, treated with 1 µM Staurosporine for 3 hours, whole cell lysate

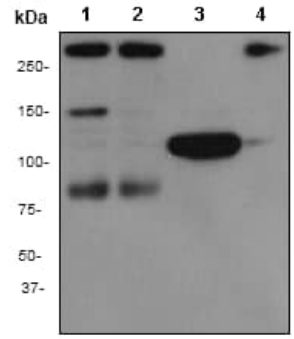
Lysates/proteins at 20 µg per lane.

Predicted band size: 285 kDa

Merged signal (red and green). Green -ab75755 observed at 285,150,120 kDa using Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) as secondary antibody.

Red - loading control, **ab7291** observed at 52 kDa using Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) as secondary antibody.

Ab75755 was shown to react with NEAS in HeLa and parental HAP1 cells. lower signal was observed when treated cells (1 µM Staurosporine for 3h) was used. Ab75755 and **ab7291** (Mouse anti alpha Tubulin loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20,000 dilution respectively. Blots were developed with **ab216773** and **ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-NEAS antibody [EPR3017] (ab75755)

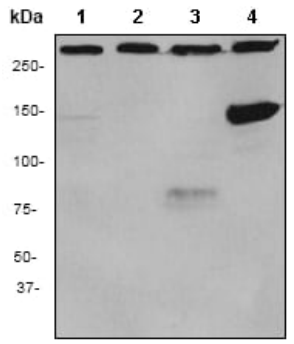
All lanes : Anti-NEAS antibody [EPR3017] (ab75755) at 1/1000 dilution

Lane 1 : HeLa cell lysate treated with Camptothecin
Lane 2 : HeLa cell lysate
Lane 3 : Jurkat treated with Staurosporine
Lane 4 : Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 285 kDa
Observed band size: 285 kDa
Additional bands at: 120 kDa (possible cleavage fragment), 150 kDa (possible cleavage fragment), 85 kDa. We are unsure as to the identity of these extra bands.



Western blot - Anti-NEAS antibody [EPR3017] (ab75755)

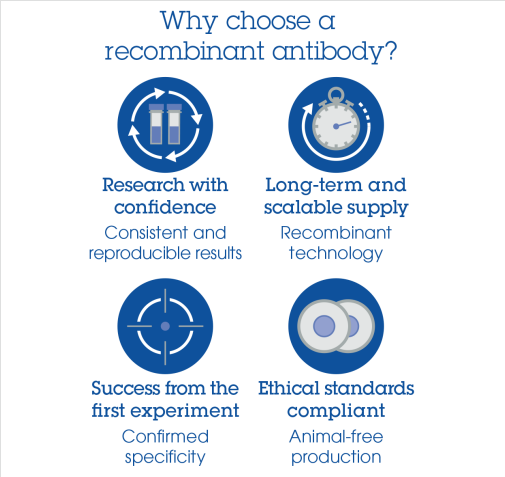
All lanes : Anti-NEAS antibody [EPR3017] (ab75755) at 1/2000 dilution

Lane 1 : TF-1 cell lysate
Lane 2 : SH-SY5Y cell lysate
Lane 3 : HeLa cell lysate
Lane 4 : human brain lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 285 kDa
Observed band size: 285 kDa
Additional bands at: 150 kDa (possible cleavage fragment)



Anti-NEAS antibody [EPR3017] (ab75755)

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