abcam

Product datasheet

Anti-Syntaxin la antibody [EPR11072(B)] ab170890

Recombinant RabMAb

4 Images

Overview

Product name Anti-Syntaxin 1a antibody [EPR11072(B)]

Description Rabbit monoclonal [EPR11072(B)] to Syntaxin 1a

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), IP, WB

Unsuitable for: ICC/IF or IHC-P

Reacts with: Human Species reactivity

Predicted to work with: Mouse, Rat

Synthetic peptide within Human Syntaxin 1a aa 1-100 (Cysteine residue). The exact sequence is **Immunogen**

proprietary.

Database link: Q16623

Positive control Fetal brain, Human cerebellum and SH-SY5Y lysates; SH-SY5Y 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 $\mathsf{RabMAb}^{\texttt{®}}$ 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: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

Purity Tissue culture supernatant

Clonality Monoclonal

Clone number EPR11072(B)

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab170890 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
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
IP		1/10 - 1/100.
WB		1/10000 - 1/50000. Predicted molecular weight: 33 kDa.

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

Target

Function Potentially involved in docking of synaptic vesicles at presynaptic active zones. May play a critical

 $\hbox{role in neurotransmitter exocytosis. May mediate $Ca(2+)$-regulation of exocytosis acrosomal}\\$

reaction in sperm.

Tissue specificity Isoform 1 is highly expressed in embryonic spinal chord and ganglia and in adult cerebellum and

cerebral cortex. Isoform 2 is expressed in heart, liver, fat, skeletal muscle, kidney and brain.

Involvement in disease Note=STX1A is located in the Williams-Beuren syndrome (WBS) critical region. WBS results

from a hemizygous deletion of several genes on chromosome 7q11.23, thought to arise as a consequence of unequal crossing over between highly homologous low-copy repeat sequences

flanking the deleted region.

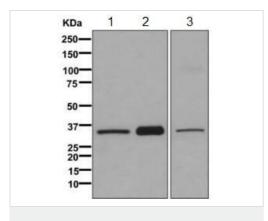
Sequence similarities Belongs to the syntaxin family.

Contains 1 t-SNARE coiled-coil homology domain.

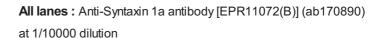
Cellular localization Secreted and Cytoplasmic vesicle > secretory vesicle > synaptic vesicle membrane. Cell junction

> synapse > synaptosome.

Images



Western blot - Anti-Syntaxin 1a antibody [EPR11072(B)] (ab170890)



Lane 1 : Fetal brain tissue lysate

Lane 2: Human cerebellum lysate

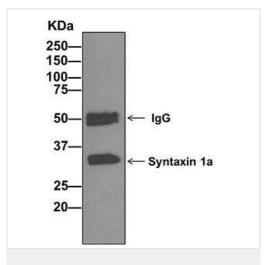
Lane 3: SH-SY5Y cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 33 kDa



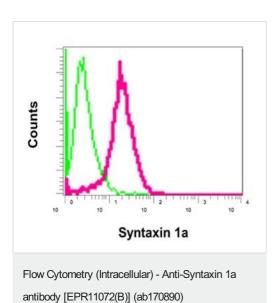
Immunoprecipitation - Anti-Syntaxin 1a antibody [EPR11072(B)] (ab170890)

Western blot analysis on immunoprecipitation pellet from human fetal brain lysate using ab170890.

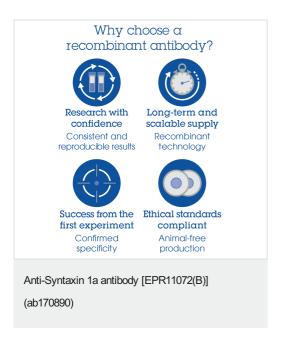
Lane 1 Primary: ab170890, 1/10000 dilution

Sample: Immunoprecipitation pellet from Human fetal brain lysate

Predicted band 33 kDa



Intracellular flow cytometric analysis of permeabilized SH-SY5Y cells labeling Syntaxin 1a with ab170890 at 1/10 dilution (red) compared to a rabbit lgG negative control (green).



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