# 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. <b>ab172730</b> - 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.

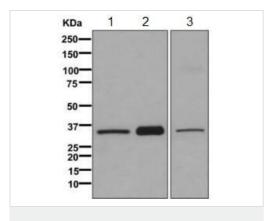
**Sequence similarities** Belongs to the syntaxin family.

Contains 1 t-SNARE coiled-coil homology domain.

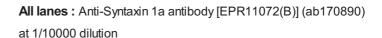
**Cellular localization** Secreted and Cytoplasmic vesicle > secretory vesicle > synaptic vesicle membrane. Cell junction

> synapse > synaptosome.

## **Images**



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



Lane 1 : Fetal brain tissue lysate

Lane 2: Human cerebellum lysate

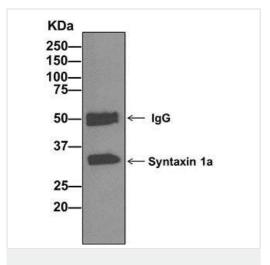
Lane 3: SH-SY5Y cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

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

Predicted band size: 33 kDa



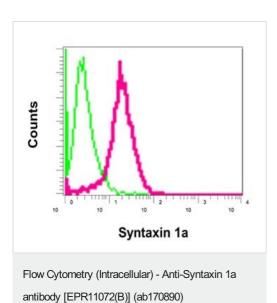
Immunoprecipitation - Anti-Syntaxin 1a antibody [EPR11072(B)] (ab170890)

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).



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