




## Product datasheet

### Anti-Synaptophysin antibody ab32594

★★★★★ [13 Abreviews](#) [54 References](#) [9 Images](#)

#### Overview

<b>Product name</b>	Anti-Synaptophysin antibody
<b>Description</b>	Rabbit polyclonal to Synaptophysin
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Rat <b>Predicted to work with:</b> Human 
<b>Immunogen</b>	Synthetic peptide: GPGGYGPQDSYGPQGGYQPD , corresponding to amino acids 253-272 of Rat Synaptophysin  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>
<b>Positive control</b>	WB: Mouse and rat brain tissue lysates. ICC/IF: rat hippocampal neurons
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.05% Sodium azide Constituents: PBS, 0.1% BSA
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab32594 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	★★★★★ (5)	1/5000. Detects a band of approximately 33.8 kDa (predicted molecular weight: 34 kDa).
ICC/IF	★★★★★ (1)	Use at an assay dependent concentration.

## Target

### Function

Possibly involved in structural functions as organizing other membrane components or in targeting the vesicles to the plasma membrane. Involved in the regulation of short-term and long-term synaptic plasticity.

### Tissue specificity

Characteristic of a type of small (30-80 nm) neurosecretory vesicles, including presynaptic vesicles, but also vesicles of various neuroendocrine cells of both neuronal and epithelial phenotype.

### Involvement in disease

Mental retardation, X-linked, SYP-related

### Sequence similarities

Belongs to the synaptophysin/synaptobrevin family.  
Contains 1 MARVEL domain.

### Domain

The calcium-binding activity is thought to be localized in the cytoplasmic tail of the protein.

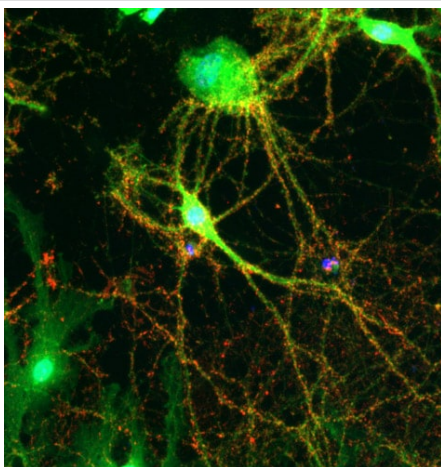
### Post-translational modifications

Ubiquitinated; mediated by SIAH1 or SIAH2 and leading to its subsequent proteasomal degradation.

### Cellular localization

Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane. Cell junction, synapse, synaptosome.

## Images

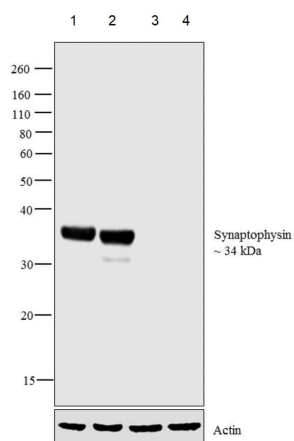


ab32594 labelling Synaptophysin by

Immunocytochemistry/Immunofluorescence in rat hippocampal neurons. The cells were fixed with 1% formaldehyde in fume hood at room temperature for 10 minutes.

ab32594 is used at 1:1500 dilution and DyLight 649 Conjugated Goat anti-Rabbit IgG used as secondary antibody at 1:1500 dilution.

Immunocytochemistry/ Immunofluorescence - Anti-Synaptophysin antibody (ab32594)



Western blot - Anti-Synaptophysin antibody (ab32594)

**All lanes :** Anti-Synaptophysin antibody (ab32594) at 1/1000 dilution

**Lane 1 :** Mouse brain tissue lysate

**Lane 2 :** Rat brain tissue lysate

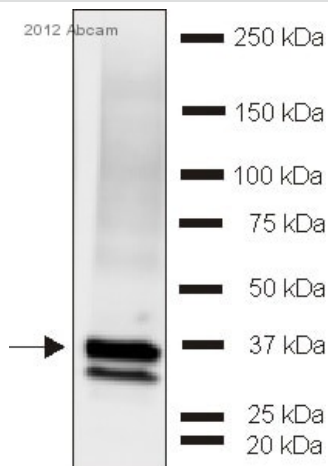
**Lane 3 :** Rat liver tissue lysate

**Lane 4 :** Rat kidney tissue lysate

Lysates/proteins at 30 µg per lane.

**Predicted band size:** 34 kDa

Western blot analysis was performed on tissue extracts (30 µg lysate). The blot was probed with ab32594 (1:1000 dilution) and detected by chemiluminescence using Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate. A 34 kDa band corresponding to Synaptophysin was observed in Mouse Brain, Rat Brain and not observed in other tissues which are documented to be Synaptophysin negative.



Western blot - Anti-Synaptophysin antibody (ab32594)

This image is courtesy of an anonymous Abreview

Anti-Synaptophysin antibody (ab32594) at 1/1000 dilution + Apterionotus leptorhynchus brain tissue lysate at 50 µg

### Secondary

AlexaFluor®488-conjugated goat anti-rabbit polyclonal IgG at 1/1000 dilution

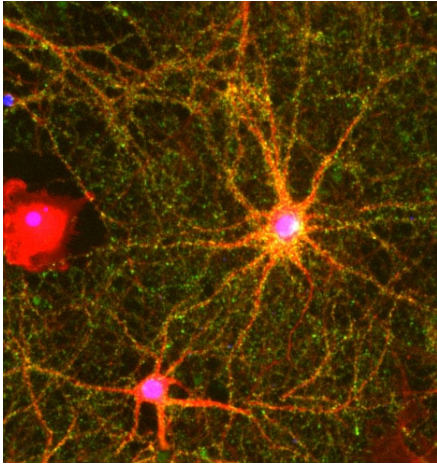
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 34 kDa

**Observed band size:** 33,35 kDa

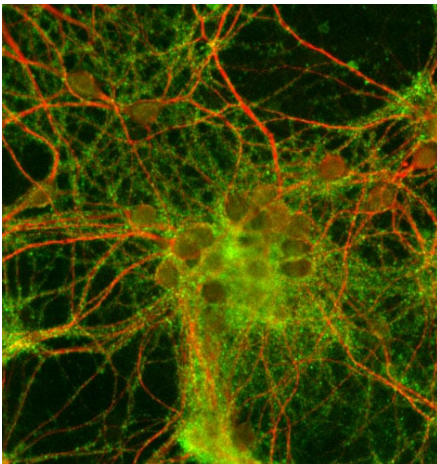
**Exposure time:** 7 minutes



Immunocytochemistry/ Immunofluorescence - Anti-Synaptophysin antibody (ab32594)

ab32594 labelling Synaptophysin by Immunocytochemistry/Immunofluorescence in rat hippocampal neurons. The cells were fixed with 1% formaldehyde in fume hood at room temperature for 10 minutes.

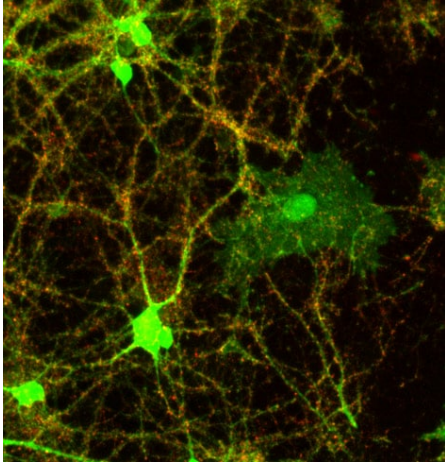
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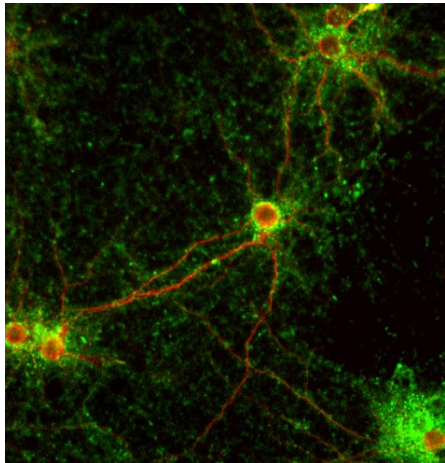
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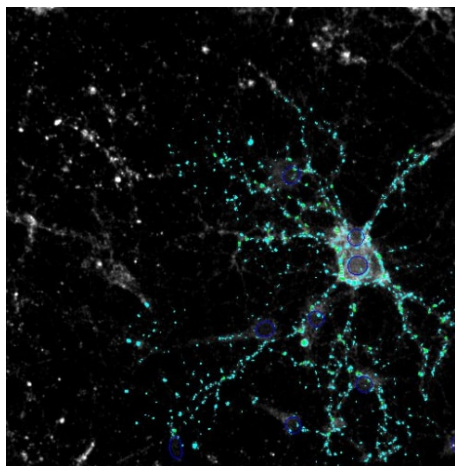
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Western blot - Anti-Synaptophysin antibody (ab32594)

Anti-Synaptophysin antibody (ab32594) at 1/5000 dilution + Rat brain

**Predicted band size:** 34 kDa

**Observed band size:** 33.8 kDa

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

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