

## Product datasheet

# Anti-Synaptophysin antibody [EPR1097-2] ab178412

Recombinant **RabMAb**

[1 References](#) [3 Images](#)

### Overview

<b>Product name</b>	Anti-Synaptophysin antibody [EPR1097-2]
<b>Description</b>	Rabbit monoclonal [EPR1097-2] to Synaptophysin
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB <b>Unsuitable for:</b> Flow Cyt or ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Rat brain, PC12, Mouse brain and Human brain lysates; PC12 cells.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR1097-2
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab178412 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		1/1000. Detects a band of approximately 38 kDa (predicted molecular weight: 33 kDa).

### Application notes

Is unsuitable for Flow Cyt or ICC/IF.

## 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.

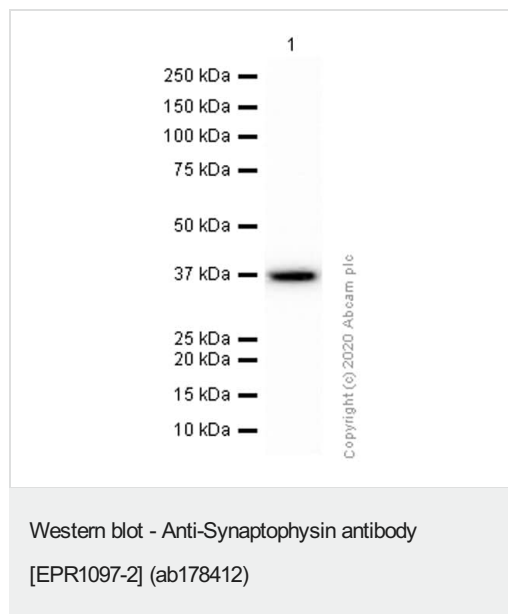
### Post-translational modifications

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



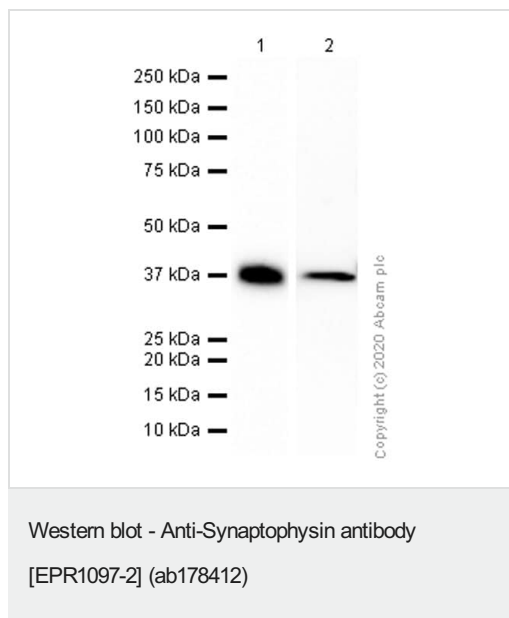
Anti-Synaptophysin antibody [EPR1097-2] (ab178412) at 1/1000 dilution (Purified) + Rat brain lysate at 15 µg

### Secondary

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size:** 33 kDa

**Observed band size:** 38 kDa



**All lanes :** Anti-Synaptophysin antibody [EPR1097-2] (ab178412)

at 1/1000 dilution (Purified)

**Lane 1 :** Human brain lysate

**Lane 2 :** Mouse brain lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size:** 33 kDa

**Observed band size:** 38 kDa

Why choose a recombinant antibody?

**Research with confidence**  
Consistent and reproducible results

**Long-term and scalable supply**  
Recombinant technology

**Success from the first experiment**  
Confirmed specificity

**Ethical standards compliant**  
Animal-free production

Anti-Synaptophysin antibody [EPR1097-2]  
(ab178412)

**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