

Product datasheet

Anti-Synaptophysin antibody [EPR1097-2] ab178412

Recombinant RabMAb

1 References 3 Images

Overview

Product name	Anti-Synaptophysin antibody [EPR1097-2]
Description	Rabbit monoclonal [EPR1097-2] to Synaptophysin
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB Unsuitable for: Flow Cyt, IHC-P or IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) within Human Synaptophysin aa 250 to the C-terminus (Cysteine residue). The exact sequence is proprietary. Database link: P08247
Positive control	Rat brain, PC12, Mouse brain and Human brain lysates; PC12 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.</p>

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.

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: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR1097-2
Isotype	IgG

Applications

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
ICC/IF		1/50 - 1/100.
WB		1/1000 - 1/5000. Detects a band of approximately 38 kDa (predicted molecular weight: 33 kDa).

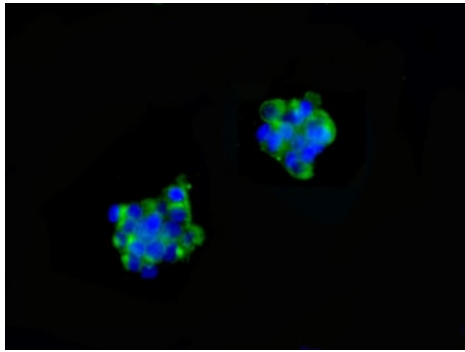
Application notes Is unsuitable for Flow Cyt, IHC-P or IP.

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.

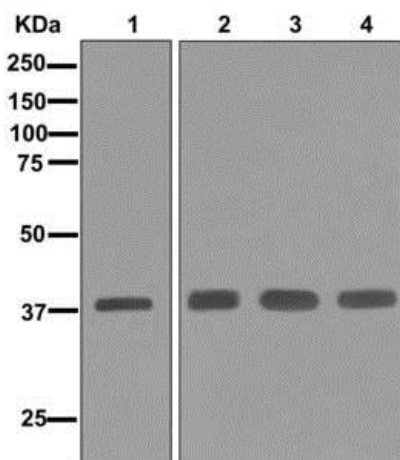
Domain	The calcium-binding activity is thought to be localized in the cytoplasmic tail of the protein.
Post-translational modifications	Ubiquitinated; mediated by SIAH1 or SIAH2 and leading to its subsequent proteasomal degradation.
Cellular localization	Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane. Cell junction, synapse, synaptosome.

Images



Immunocytochemistry/ Immunofluorescence - Anti-Synaptophysin antibody [EPR1097-2] (ab178412)

Immunofluorescent analysis of PC12 cells labeling Synaptophysin with ab178412 at 1/50 (green) and DAPI staining (blue).



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

All lanes : Anti-Synaptophysin antibody [EPR1097-2] (ab178412) at 1/1000 dilution

Lane 1 : Rat brain lysate

Lane 2 : PC12 lysate

Lane 3 : Mouse brain lysate

Lane 4 : Human brain lysate

Lysates/proteins at 10 µg per lane.


Secondary

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

Predicted band size: 33 kDa

Additional bands at: 38 kDa. We are unsure as to the identity of these extra bands.

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"

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