

# **Product datasheet**

# Alexa Fluor® 488 Anti-Synaptophysin antibody [YE269] ab196379

Recombinant RabMAb

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Overview		
Product name	Alexa Fluor® 488 Anti-Synaptophysin antibody [YE269]	
Description	Alexa Fluor® 488 Rabbit monoclonal [YE269] to Synaptophysin	
Host species	Rabbit	
Conjugation	Alexa Fluor® 488. Ex: 495nm, Em: 519nm	
Tested applications	Suitable for: Flow Cyt, ICC/IF	
Species reactivity Reacts with: Rat		
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. (Peptide available as <u>ab189853</u> )	
Positive control	ICC/IF: PC12 cells. Flow Cyt: PC12 cells.	
General notes	Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <b><u>RabMAb<sup>®</sup> patents</u></b> .	
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#### **Properties**

Form

Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	YE269
lsotype	lgG

## Applications

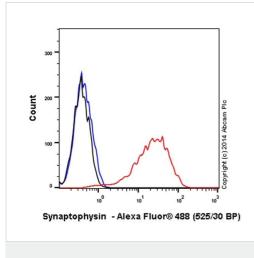
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab196379 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

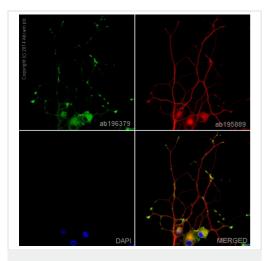
Application	Abreviews	Notes
Flow Cyt		1/500. <u>ab199091</u> - Rabbit monoclonal IgG (Alexa Fluor <sup>®</sup> 488), is suitable for use as an isotype control with this antibody.
ICC/IF	$\star$ $\star$ $\star$ $\star$ $\star$ (1)	1/100.

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



Flow Cytometry - Alexa Fluor® 488 Anti-Synaptophysin antibody [YE269] (ab196379)



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Synaptophysin antibody [YE269] (ab196379)

Overlay histogram showing PC12 cells stained with ab196379 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab196379, 1/500 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) Alexa Fluor® 488 used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

This antibody gave a positive signal in PC12 fixed with 4% formaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

ab196379 staining Synaptophysin in PC12 cells. The cells were fixed with 100% methanol (5 min), permeabilised in 0.1% Triton X-100 for 5 minutes and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated with ab196379 at 1/100 dilution (shown in green) and **ab195889**, Mouse monoclonal [DM1A] to alpha Tubulin (Alexa Fluor<sup>®</sup> 594, shown in red) at 1/167 dilution overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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