# abcam

## **Product datasheet**

# Anti-Synaptophysin antibody [YE269] - Mouse IgG1 (Chimeric) ab309493

敲除 验证 重组

10 图**像** 

概述		
产品名称	Anti-Synaptophysin <b>抗体</b> [YE269] - <b>小</b> 鼠lgG1 (Chimeric)	
描述	<b>小鼠</b> 单 <b>克隆抗体[YE</b> 269] to Synaptophysin - Chimeric	
宿主	Mouse	
经测试应用	适用于: ICC/IF, WB, IHC-P 不适用于: IHC-Fr	
<b>种属反应性</b>	与反应: Mouse, Rat, Human	
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.	
阳性对照	WB: Mouse brain, cerebellum and hippocampus tissue lysate. Rat brain and cerebellum tissue lysate. Human cerebellum tissue lysate. Wild-type 293T whole lysate. IHC-P: Human pancreas tissue. Mouse and rat cerebrum tissue. ICC/IF: Mouse and rat primary neurons.	
<b>常</b> 规说 <b>明</b>	This mouse monoclonal chimeric antibody has been engineered from a RabMAb parent antibody ( <u>ab32127</u> ). By design, some rabbit sequence is retained as part of the variable domain. When multiplexing with other rabbit-derived antibodies, using cross absorbed FC-reactive secondary antibodies are recommended.	
	This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.	
	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <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> <li>For more information <u>see here</u>.</li> </ul>	
性能		
形式	Liquid	

### **存放**说明

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.

存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS
纯 <b>度</b>	Protein A purified
克隆	单 <b>克隆</b>
克 <b>隆</b> 编号	YE269
同种型	lgG1

应用

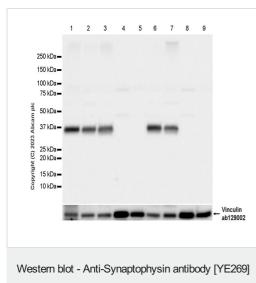
#### The Abpromise guarantee Abpromise™承诺保证使用ab309493于以下的经测试应用

#### "应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		1/100.
WB		1/5000. Predicted molecular weight: 33 kDa.
IHC-P		1/20000.
应用说明	ls unsuitable for ⊩	łC-Fr.

<b>靶</b> 标	
功能	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.
组织 <b>特异性</b>	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.
疾病相关	Mental retardation, X-linked, SYP-related
序列相似性	Belongs to the synaptophysin/synaptobrevin family. Contains 1 MARVEL domain.
结 <b>构域</b>	The calcium-binding activity is thought to be localized in the cytoplasmic tail of the protein.
<b>翻</b> 译 <b>后修</b> 饰	Ubiquitinated; mediated by SIAH1 or SIAH2 and leading to its subsequent proteasomal degradation.
细 <b>胞定位</b>	Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane. Cell junction, synapse, synaptosome.

图片



- Mouse IgG1 (Chimeric) (ab309493)

**All lanes :** Anti-Synaptophysin antibody [YE269] - Mouse IgG1 (Chimeric) (ab309493) at 1/5000 dilution

- Lane 1 : Mouse brain tissue lysate
- Lane 2 : Mouse cerebellum tissue lysate
- Lane 3 : Mouse hippocampus tissue lysate
- Lane 4 : Mouse heart tissue lysate
- Lane 5 : Mouse kidney tissue lysate
- Lane 6 : Rat brain tissue lysate
- Lane 7 : Rat cerebellum tissue lysate
- Lane 8 : Rat heart tissue lysate
- Lane 9 : Rat kidney tissue lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

All lanes : Goat Anti-Mouse IgG Fc (HRP) preadsorbed (<u>ab98717</u>) at 1/20000 dilution

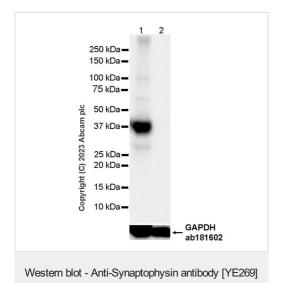
Predicted band size: 33 kDa Observed band size: 38 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Low expression tissues: Kidney and heart (PMID:11604140).

In Western blot, anti- Vinculin antibody (<u>ab129002</u>) loading control staining at 1/10000 dilution.

Exposure time: 1 second.



- Mouse IgG1 (Chimeric) (ab309493)

**All lanes :** Anti-Synaptophysin antibody [YE269] - Mouse IgG1 (Chimeric) (ab309493) at 1/5000 dilution

Lane 1 : Human cerebellum tissue lysate 10 µg Lane 2 : Human kidney tissue lysate 20 µg

#### Secondary

All lanes : Goat Anti-Mouse IgG Fc (HRP) preadsorbed (<u>ab98717</u>) at 1/20000 dilution

Predicted band size: 33 kDa Observed band size: 38 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Low expression tissue: Kidney (PMID:11604140).

In Western blot, anti-GAPDH antibody (<u>ab181602</u>) loading control staining at 1/200000 dilution.

Exposure time: 8 seconds.

**All lanes :** Anti-Synaptophysin antibody [YE269] - Mouse IgG1 (Chimeric) (ab309493) at 1/5000 dilution

Lane 1 : Wild-type 293T (human embryonic kidney epithelial cell) whole cell lysate 20 µg Lane 2 : SYP knockout 293T whole cell lysate 20 µg

#### Secondary

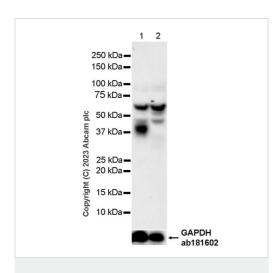
All lanes : Goat Anti-Mouse IgG Fc (HRP) preadsorbed (<u>ab98717</u>) at 1/20000 dilution

Predicted band size: 33 kDa Observed band size: 38 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Performed under reducing conditions.

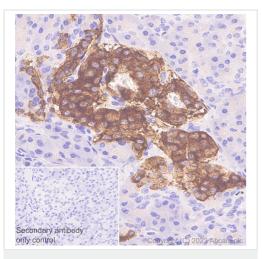
In Western blot, ab309493 was shown to bind specifically to Synaptophysin (SYP). Target of interest was observed at 38 kDa wild-type 293T cell lysates (lane 1) with no signal observed at this size in SYP knockout cell line (lane 2, knockout cell line <u>ab267272</u>/



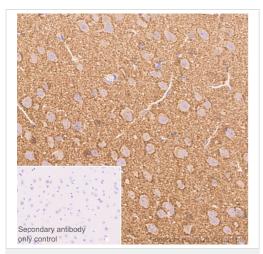
Western blot - Anti-Synaptophysin antibody [YE269] - Mouse IgG1 (Chimeric) (ab309493) knockout cell lysate ab257060).

In Western blot, anti-GAPDH antibody (<u>ab181602</u>) loading control staining at 1/200000 dilution.

Exposure time: 59 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Synaptophysin antibody [YE269] - Mouse IgG1 (Chimeric) (ab309493)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Synaptophysin antibody [YE269] - Mouse IgG1 (Chimeric) (ab309493)

Immunohistochemical analysis of paraffin-embedded human pancreas tissue labeling Synaptophysin with ab309493 at 1/20000 (0.047 ug/ml) followed by a ready to use LeicaDS9800 (Bond<sup>™</sup> Polymer Refine Detection).

Positive staining on the islet in human pancreas.

The section was incubated with ab309493 for 30 mins at room temperature, followed by anti-mouse IgG1 antibody (**ab125913**) for 8 mins during the LeicaDS9800 kit staining procedure. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond <sup>™</sup> Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

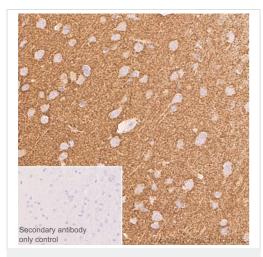
Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling Synaptophysin with ab309493 at 1/20000 (0.047 ug/ml) followed by a ready to use LeicaDS9800 (Bond<sup>™</sup> Polymer Refine Detection).

Positive staining on mouse cerebrum.

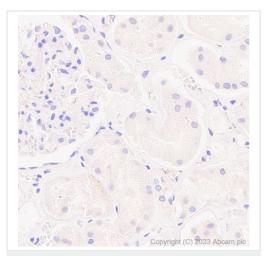
The section was incubated with ab309493 for 30 mins at room temperature, followed by anti-mouse IgG1 antibody (<u>ab125913</u>) for 8 mins during the LeicaDS9800 kit staining procedure. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond <sup>™</sup> Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Synaptophysin antibody [YE269] - Mouse IgG1 (Chimeric) (ab309493)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Synaptophysin antibody [YE269] - Mouse IgG1 (Chimeric) (ab309493)

Immunohistochemical analysis of paraffin-embedded rat cerebrum tissue labeling Synaptophysin with ab309493 at 1/20000 (0.047 ug/ml) followed by a ready to use LeicaDS9800 (Bond<sup>™</sup> Polymer Refine Detection).

Positive staining on rat cerebrum.

The section was incubated with ab309493 for 30 mins at room temperature, followed by anti-mouse IgG1 antibody (<u>ab125913</u>) for 8 mins during the LeicaDS9800 kit staining procedure. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond <sup>™</sup> Polymer Refine Detection).

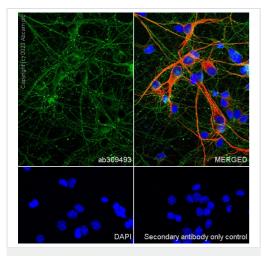
Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling Synaptophysin with ab309493 at 1/20000 (0.047 ug/ml) followed by a ready to use LeicaDS9800 (Bond<sup>™</sup> Polymer Refine Detection).

Low expression tissue: almost no staining on human kidney.

The section was incubated with ab309493 for 30 mins at room temperature, followed by anti-mouse IgG1 antibody (<u>ab125913</u>) for 8 mins during the LeicaDS9800 kit staining procedure. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



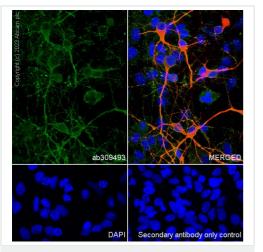
Immunocytochemistry/ Immunofluorescence - Anti-Synaptophysin antibody [YE269] - Mouse IgG1 (Chimeric) (ab309493)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neurons labelling Synaptophysin with ab309493 at 1/100 dilution, followed by <u>ab150113</u> Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green).

Confocal image showing cytoplasmic staining in mouse primary neuron cell line.

Confocal scanning Z step was set as 0.3 µM followed by image processing with maximum Z projection. Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). iab183830 Anti-MAP2 rabbit monoclonal antibody was used to counterstain tubulin at 1/1000 dilution, followed by **ab150080** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) at a 1/500 dilution (Red). The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150113</u> Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-Synaptophysin antibody [YE269] - Mouse IgG1 (Chimeric) (ab309493)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized rat primary neurons labelling Synaptophysin with ab309493 at 1/100 dilution, followed by <u>ab150113</u> Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green).

Confocal image showing cytoplasmic staining in rat primary neuron cell line.

Confocal scanning Z step was set as 0.3 µM followed by image processing with maximum Z projection. Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). iab183830 Anti-MAP2 rabbit monoclonal antibody was used to counterstain tubulin at 1/1000 dilution, followed by **ab150080** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) at a 1/500 dilution (Red). The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150113</u> Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Anti-Synaptophysin antibody [YE269] - Mouse IgG1 (Chimeric) (ab309493)

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