

Anti-Synaptophysin Antibody (Monoclonal, SVP-38)
Catalog # ABO10475**Specification****Anti-Synaptophysin Antibody (Monoclonal, SVP-38) - Product Information**

Application	WB, IHC
Primary Accession	P07825
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human, Rat
Clonality	Monoclonal
Format	Lyophilized

Description

Mouse IgG monoclonal antibody for Synaptophysin, synaptophysin (SYP) detection. Tested with WB, IHC-P, IHC-F in Human;Rat. No cross reactivity with other proteins.

Reconstitution

Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Anti-Synaptophysin Antibody (Monoclonal, SVP-38) - Additional Information

Gene ID 24804

Other Names

Synaptophysin, Major synaptic vesicle protein p38, Syp

Calculated MW

33311 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 1-2 µg/ml, Human, rat, By Heat

Immunohistochemistry(Frozen Section), 1-2 µg/ml, Human, rat, -
Western blot, 0.5-1 µg/ml, Human, rat

Subcellular Localization

Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Multi-pass membrane protein. Cell junction, synapse, synaptosome.

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.

Protein Name

Synaptophysin

Contents

Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN₃ as preservative.

Immunogen

Rat retina synaptosome.

Purification

Ascites

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the synaptophysin/synaptobrevin family.

Anti-Synaptophysin Antibody (Monoclonal, SVP-38) - Protein Information**Name** Syp**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 (By similarity).

Cellular Location

Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane
{ECO:0000250|UniProtKB:Q62277}; Multi-pass membrane protein. Synapse, synaptosome
{ECO:0000250|UniProtKB:P08247}

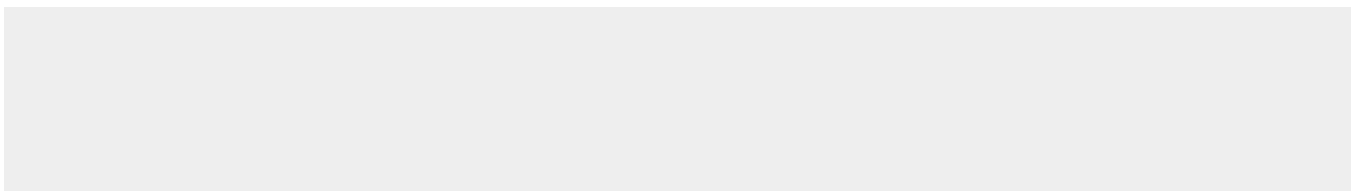
Tissue Location

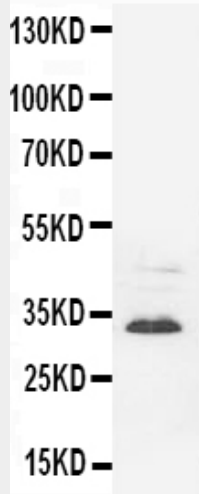
Expressed in the brain with expression in the cerebrum and the cerebellum.

Anti-Synaptophysin Antibody (Monoclonal, SVP-38) - Protocols

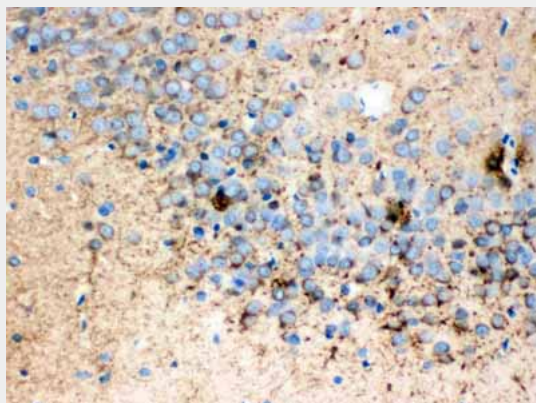
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

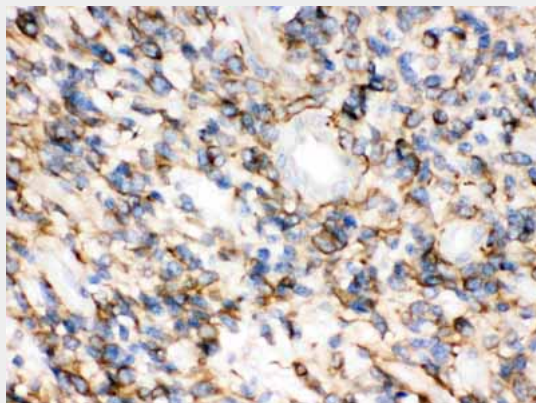
Anti-Synaptophysin Antibody (Monoclonal, SVP-38) - Images



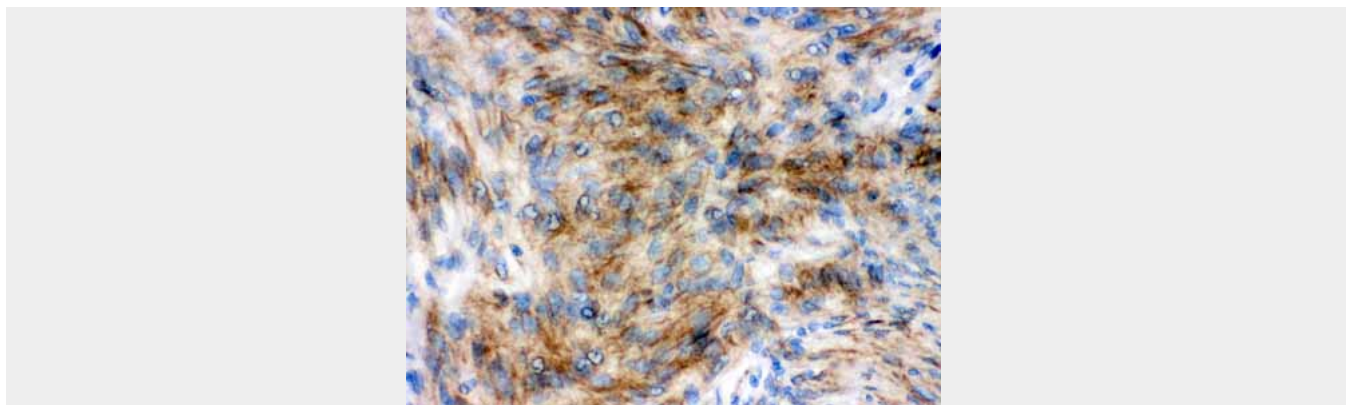
Anti-Synaptophysin antibody (monoclonal), ABO10475, Western blottingWB: Rat Brain Tissue Lysate



Anti-Synaptophysin antibody (monoclonal), ABO10475, IHC(P)IHC(P): Rat Brain Tissue



Anti-Synaptophysin antibody (monoclonal), ABO10475, IHC(P)IHC(P): Human Glioma Tissue



Anti-Synaptophysin antibody (monoclonal), ABO10475, IHC(P)IHC(P): Human meningioma Tissue

Anti-Synaptophysin Antibody (Monoclonal, SVP-38) - Background

Synaptophysin(SYP) is an integral membrane protein of small synaptic vesicles in brain and endocrine cells. Ozelik et al.(1990) concluded that the gene has 7 exons distributed over about 20 kb. SYP mapped the SYP locus to Xp11.23-p11.22. Regionalization of the gene on the X chromosome was also done with hamster/human hybrid cells in which various portions of the human X chromosome were present.