10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Phospho-Synapsin I (S9) Antibody
**Rabbit mAb**
**Catalog # AP90665**

## Specification

### Phospho-Synapsin I (S9) Antibody - Product Information

| | |
|---|---|
| Application | **WB, IHC** |
| Primary Accession | P17600 |
| Reactivity | **Rat** |
| Clonality | **Monoclonal** |
| **Other Names** | |
| Brain protein 4.1; SYN-1; synapsin I; | |
| Isotype | **Rabbit IgG** |
| Host | **Rabbit** |
| Calculated MW | **74111 Da** |

### Phospho-Synapsin I (S9) Antibody - Additional Information

| | |
|---|---|
| Purification | **Affinity-chromatography** |
| Immunogen | **A synthesized peptide derived from human Phospho-Synapsin I (S9)** |
| Description | **This gene is a member of the synapsin gene family. Synapsins encode neuronal phosphoproteins which associate with the cytoplasmic surface of synaptic vesicles. Family members are characterized by common protein domains, and they are implicated in synaptogenesis and the modulation of neurotransmitter release, suggesting a potential role in several neuropsychiatric diseases.** |
| Storage Condition and Buffer | **Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.** |

### Phospho-Synapsin I (S9) Antibody - Protein Information

**Name** SYN1

**Function**
Neuronal phosphoprotein that coats synaptic vesicles, and binds to the cytoskeleton. Acts as a regulator of synaptic vesicles trafficking, involved in the control of neurotransmitter release at the pre-synaptic terminal (PubMed:<a href="http://www.uniprot.org/citations/21441247" target="_blank">21441247</a>, PubMed:<a href="http://www.uniprot.org/citations/23406870" target="_blank">23406870</a>). Also involved in the regulation of axon outgrowth and synaptogenesis (By similarity). The complex formed with NOS1 and CAPON proteins is necessary

for specific nitric-oxid functions at a presynaptic level (By similarity).

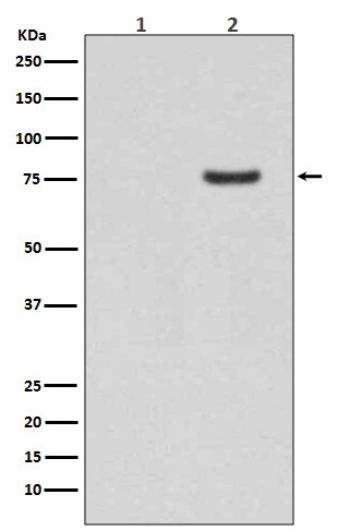
**Cellular Location**
Synapse {ECO:0000250|UniProtKB:O88935}. Golgi apparatus {ECO:0000250|UniProtKB:O88935}. Presynapse. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle {ECO:0000250|UniProtKB:P09951}. Note=Dissociates from synaptic vesicles and redistributes into the axon during action potential firing, in a step that precedes fusion of vesicles with the plasma membrane. Reclusters to presynapses after the cessation of synaptic activity. {ECO:0000250|UniProtKB:P09951}

## Phospho-Synapsin I (S9) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Phospho-Synapsin I (S9) Antibody - Images




Western blot analysis of Phospho-Synapsin I (S9) expression in (1) Human brain lysate; (2) Human brain lysate treated with AP.