

**Acetyl SYN1 Antibody (Center K311) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP19249c****Specification**

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**Acetyl SYN1 Antibody (Center K311) Blocking peptide - Product Information**Primary Accession [P17600](#)**Acetyl SYN1 Antibody (Center K311) Blocking peptide - Additional Information****Gene ID** 6853**Other Names**

Synapsin-1, Brain protein 41, Synapsin I, SYN1

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Acetyl SYN1 Antibody (Center K311) Blocking peptide - 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}

## **Acetyl SYN1 Antibody (Center K311) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

## **Acetyl SYN1 Antibody (Center K311) Blocking peptide - Images**

## **Acetyl SYN1 Antibody (Center K311) Blocking peptide - Background**

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. This member of the synapsin family plays a role in regulation of axonogenesis and synaptogenesis. The protein encoded serves as a substrate for several different protein kinases and phosphorylation may function in the regulation of this protein in the nerve terminal. Mutations in this gene may be associated with X-linked disorders with primary neuronal degeneration such as Rett syndrome. Alternatively spliced transcript variants encoding different isoforms have been identified.

## **Acetyl SYN1 Antibody (Center K311) Blocking peptide - References**

Smith, A.J., et al. J. Acquir. Immune Defic. Syndr. 55(3):306-315(2010) Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Gratacos, M., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 150B (6), 808-816 (2009) :Wang, J.L., et al. J. Neurosci. Res. 87(10):2255-2263(2009)