

SYT1 Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP13709b

Specification

SYT1 Antibody (C-term) Blocking peptide - Product Information

Primary Accession

P21579

SYT1 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 6857

Other Names

Synaptotagmin-1, Synaptotagmin I, Sytl, p65, SYT1, SVP65, SYT

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13709b was selected from the C-term region of SYT1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

SYT1 Antibody (C-term) Blocking peptide - Protein Information

Name SYT1 (HGNC:11509)

Synonyms SVP65, SYT

Function

Calcium sensor that participates in triggering neurotransmitter release at the synapse (By similarity). May have a regulatory role in the membrane interactions during trafficking of synaptic vesicles at the active zone of the synapse (By similarity). It binds acidic phospholipids with a specificity that requires the presence of both an acidic head group and a diacyl backbone. A Ca(2+)- dependent interaction between synaptotagmin and putative receptors for activated protein kinase C has also been reported. It can bind to at least three additional proteins in a Ca(2+)-independent manner; these are neurexins, syntaxin and AP2. Plays a role in dendrite formation by melanocytes (PubMed:23999003).

Cellular Location



Cytoplasmic vesicle, secretory vesicle membrane {ECO:0000250|UniProtKB:P21707}; Single-pass membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250|UniProtKB:P21707}; Single-pass membrane protein {ECO:0000250|UniProtKB:P21707}. Cytoplasmic vesicle, secretory vesicle, chromaffin granule membrane {ECO:0000250|UniProtKB:P21707}; Single-pass membrane protein {ECO:0000250|UniProtKB:P21707}.

Tissue Location

Expressed in melanocytes (PubMed:23999003).

SYT1 Antibody (C-term) Blocking peptide - Protocols

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

• Blocking Peptides

SYT1 Antibody (C-term) Blocking peptide - Images

SYT1 Antibody (C-term) Blocking peptide - Background

The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as Ca(2+) sensors in the processof vesicular trafficking and exocytosis. Calcium binding tosynaptotagmin-1 participates in triggering neurotransmitter releaseat the synapse (Fernandez-Chacon et al., 2001 [PubMed11242035]).

SYT1 Antibody (C-term) Blocking peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Musch, M.W., et al. Am. J. Physiol. Gastrointest. Liver Physiol. 298 (2), G203-G211 (2010) :Kathir, K.M., et al. Biochim. Biophys. Acta 1798(2):297-302(2010)Pattaro, C., et al. BMC Med. Genet. 11, 41 (2010) :Hamdan, F.F., et al. Ann. Neurol. 65(6):748-753(2009)