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SYT1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13709b

Specification

SYT1 Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P21579
Other Accession	P21707, P46096, Q60HC0, P47191, P48018, NP_001129278.1, NP_005630.1, NP_001129277.1
Reactivity	**Human**
Predicted	**Bovine, Chicken, Monkey, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**47573**
Antigen Region	**349-377**

SYT1 Antibody (C-term) - Additional Information

Gene ID 6857

Other Names
Synaptotagmin-1, Synaptotagmin I, SytI, p65, SYT1, SVP65, SYT

Target/Specificity
This SYT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 349-377 amino acids from the C-terminal region of human SYT1.

Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
SYT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SYT1 Antibody (C-term) - 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}. Cytoplasm {ECO:0000250|UniProtKB:P21707}

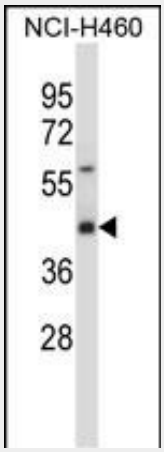
Tissue Location
Expressed in melanocytes (PubMed:23999003).

SYT1 Antibody (C-term) - 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

SYT1 Antibody (C-term) - Images



SYT1 Antibody (C-term) (Cat. #AP13709b) western blot analysis in NCI-H460 cell line lysates

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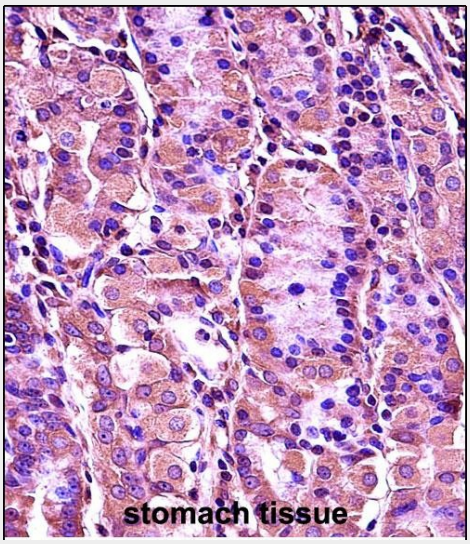
(35ug/lane).This demonstrates the SYT1 antibody detected the SYT1 protein (arrow).



SYT1 Antibody (C-term) (Cat. #AP13709b)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of SYT1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

SYT1 Antibody (C-term) - Background

The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as Ca(2+) sensors in the process of vesicular trafficking and exocytosis. Calcium binding to synaptotagmin-1 participates in triggering neurotransmitter release at the synapse (Fernandez-Chacon et al., 2001 [PubMed 11242035]).

SYT1 Antibody (C-term) - 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)