

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

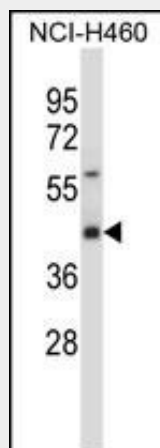
Expressed in melanocytes (PubMed:[23999003](#)).

SYT1 Antibody (C-term) - Protocols

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

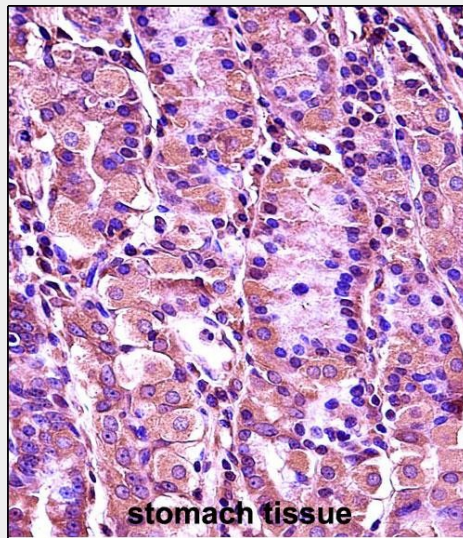
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SYT1 Antibody (C-term) - Images



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

(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)