

**SYT1 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1235a**

**Specification**

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**SYT1 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P21579</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>

**Description**

SYT1: synaptotagmin I. 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 I participates in triggering neurotransmitter release at the synapse.

**Immunogen**

Purified recombinant fragment of SYT1 expressed in E. Coli. <br />

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**SYT1 Antibody - Additional Information**

**Gene ID** 6857

**Other Names**

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

**Dilution**

WB~~1/500 - 1/2000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

SYT1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**SYT1 Antibody - 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:<a href="http://www.uniprot.org/citations/23999003" target="\_blank">23999003</a>).

#### 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 - 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 - Images

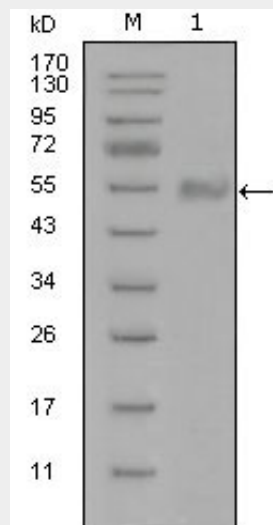


Figure 1: Western blot analysis using SYT1 mouse mAb against truncated Trx-SYT1 recombinant

protein (1).

### **SYT1 Antibody - References**

1. Cell. 2005 Sep 23;122(6):957-68.
2. FASEB J. 2008 Jun;22(6):2045-52.