

SYT1 Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO1235a

Product Information

Application	WB, E
Primary Accession	P21579
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	8G11B10
Isotype	IgG1
Calculated MW	47573
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.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	6857
Other Names	Synaptotagmin-1, Synaptotagmin I, SytI, p65, SYT1, SVP65, SYT
Dilution	WB~~1/500 - 1/2000 E~~N/A
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.

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).

References

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

Images

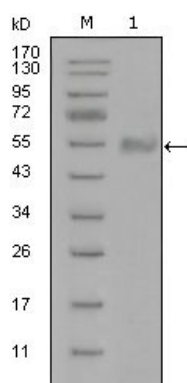


Figure 1: Western blot analysis using SYT1 mouse mAb against truncated Trx-SYT1 recombinant protein (1).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.