



Synaptotagmin 1 Monoclonal Antibody

Catalog No	YP-Ab-00617
Isotype	IgG
Reactivity	Human
Applications	WB;ELISA
Gene Name	SYT1
Immunogen	Purified recombinant fragment of Synaptotagmin 1 expressed in E. Coli.
Specificity	Synaptotagmin 1 Monoclonal Antibody detects endogenous levels of Synaptotagmin 1 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide, 0.5% BSA, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Synaptotagmin 1; SYT1; P65; SVP65; synaptotagmin I; Synaptotagmin 1/2; Synaptotagmin-1; SYT; SytI
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Cytoplasmic vesicle, secretory vesicle membrane ; Single-pass membrane protein . Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane ; Single-pass membrane protein . Cytoplasmic vesicle, secretory vesicle, chromaffin granule membrane ; Single-pass membrane protein . Cytoplasm .
Tissue Specificity	Expressed in melanocytes (PubMed:23999003).
Function	cofactor: Binds 3 calcium ions per subunit. The ions are bound to the C2 domains., domain: The first C2 domain mediates Ca(2+)-dependent phospholipid binding., domain: The second C2 domain mediates interaction with SV2A and STN2., function: May have a regulatory role in the membrane interactions during trafficking of synaptic vesicles at the active zone of the synapse. 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.,similarity:Belongs to the synaptotagmin family.,similarity:Contains 2 C2 domains.,subcellular location:Synaptic vesicles and chromaffin granules.,subunit:H

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]).[supplied by OMIM, Jul 2010],

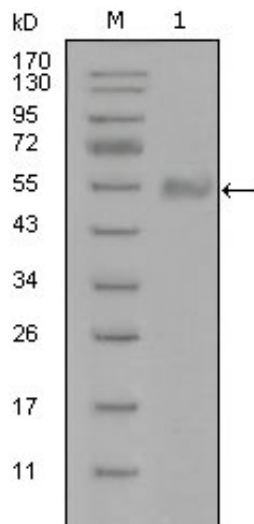
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis using Synaptotagmin 1 Monoclonal Antibody against truncated Trx-Synaptotagmin 1 recombinant protein (1).