Synaptotagmin 1 Monoclonal Antibody

Catalog No :	YM0605
Reactivity :	Human
Applications :	WB;ELISA
Target :	Synaptotagmin 1/2
Fields :	>>Synaptic vesicle cycle
Gene Name :	SYT1
Protein Name :	Synaptotagmin-1
Human Gene Id :	6857
Human Swiss Prot No :	P21579
Mouse Swiss Prot No :	P46096
Immunogen :	Purified recombinant fragment of Synaptotagmin 1 expressed in E. Coli.
Specificity :	Synaptotagmin 1 Monoclonal Antibody detects endogenous levels of Synaptotagmin 1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
P References :	1. Cell. 2005 Sep 23;122(6):957-68. 2. FASEB J. 2008 Jun;22(6):2045-52.

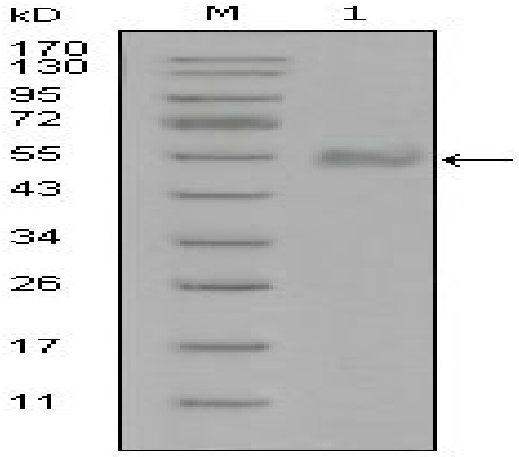
Background : The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as Ca(2+) sensors in the process of vesicular trafficking and exocytosis. Calcium binding to synaptotagmin-1 participates in triggering neurotransmitter release at the synapse (Fernandez-Chacon et al., 2001 [PubMed 11242035]).[supplied by OMIM, Jul 2010],

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

Subcellular Location : 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 .

Expression : Expressed in melanocytes (PubMed:23999003).

Products Images



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