

Synaptotagmin 1 Monoclonal Antibody

Catalog No: YM0605

Reactivity: Human

Applications: WB;ELISA

Target: Synaptotagmin 1/2

Fields: >>Synaptic vesicle cycle

P21579

P46096

Gene Name: SYT1

Protein Name: Synaptotagmin-1

Human Gene Id: 6857

Human Swiss Prot

No:

Mouse Swiss Prot

No:

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).

Tag: orthogonal

Sort: 16808

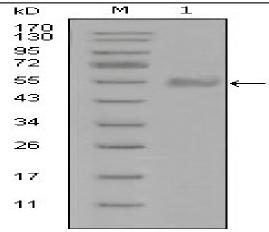
No4: 1

Host: Mouse

Modifications: Unmodified

Products Images

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