



# Synaptotagmin 1 Monoclonal Antibody

|                           |  |
|---------------------------|--|
| <b>Catalog No</b>         | YP-Ab-00617  |
| <b>Isotype</b>            | IgG  |
| <b>Reactivity</b>         | Human  |
| <b>Applications</b>       | WB;ELISA   |
| <b>Gene Name</b>          | SYT1   |
| <b>Protein Name</b>       | Synaptotagmin-1  |
| <b>Immunogen</b>          | Purified recombinant fragment of Synaptotagmin 1 expressed in E. Coli.   |
| <b>Specificity</b>        | Synaptotagmin 1 Monoclonal Antibody detects endogenous levels of Synaptotagmin 1 protein.  |
| <b>Formulation</b>        | Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.   |
| <b>Source</b>             | Monoclonal, Mouse  |
| <b>Purification</b>       | Affinity purification  |
| <b>Dilution</b>           | Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.  |
| <b>Concentration</b>      | 1 mg/ml  |
| <b>Purity</b>             | ≥90%   |
| <b>Storage Stability</b>  | -20°C/1 year   |
| <b>Synonyms</b>           | SYT1; SVP65; SYT; Synaptotagmin-1; Synaptotagmin I; SytI; p65  |
| <b>Observed Band</b>      |  |
| <b>Cell Pathway</b>       | 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 .   |
| <b>Tissue Specificity</b> | Expressed in melanocytes (PubMed:23999003).  |
| <b>Function</b>           | 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<sup>2+</sup> 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],

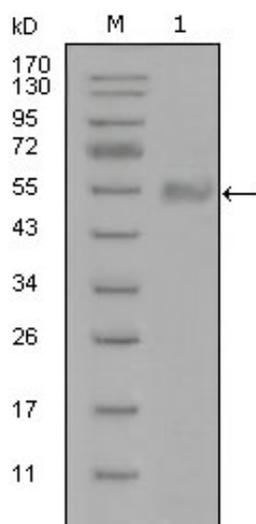
**matters needing attention**

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).