



Synaptotagmin Polyclonal Antibody

Catalog No	YP-Ab-00741
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	SYT1/SYT2
Immunogen	The antiserum was produced against synthesized peptide derived from human Synaptotagmin. AA range:276-325
Specificity	Synaptotagmin Polyclonal Antibody detects endogenous levels of Synaptotagmin protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Synaptotagmin II;Synaptotagmin-2;SytlI;Synaptotagmin 1/2;SYT1/SYT2; Synaptotagmin-1/2;SYT1;SVP65;SYT;Synaptotagmin-1;Synaptotagmin I;Sytl; p65;SYT2
Observed Band	50kD
Calculated Molecular Weight	50kD
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

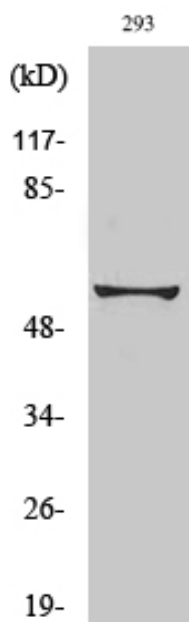
Avoid repeated freezing and thawing!

Usage suggestions

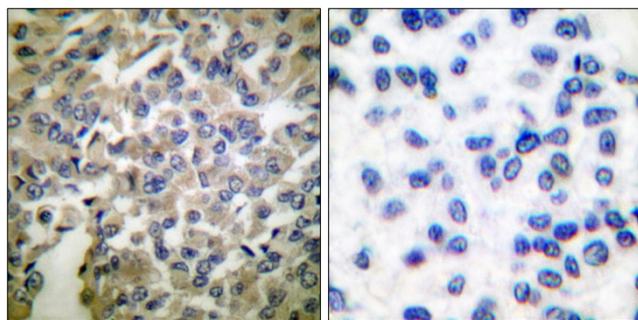
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



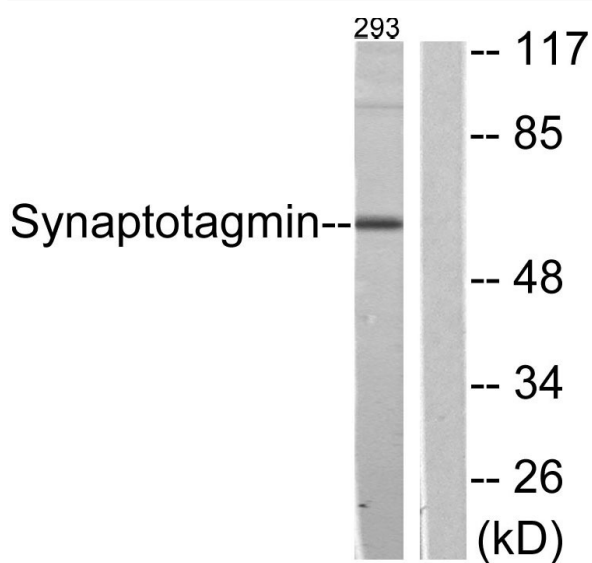
Products Images



Western Blot analysis of various cells using Synaptotagmin Polyclonal Antibody diluted at 1:2000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Synaptotagmin Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, treated with Forskolin 40nM 30', using Synaptotagmin Antibody. The lane on the right is blocked with the synthesized peptide.