



Synaptotagmin 1/2 (phospho Ser309/306) Polyclonal Antibody

Catalog No	YP-Ab-00640
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 around the phosphorylation site of Ser309. AA range:276-325
Specificity	Phospho-Synaptotagmin 1/2 (S309/306) Polyclonal Antibody detects endogenous levels of Synaptotagmin 1/2 protein only when phosphorylated at S309/306.
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: 1/10000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Synaptotagmin 1/2;SYT1/SYT2;Synaptotagmin-1/2;SYT1;SVP65;SYT; Synaptotagmin-1;Synaptotagmin I;Sytl;p65;SYT2;Synaptotagmin-2; Synaptotagmin II;SytlI
Observed Band	47kD
Calculated Molecular Weight	47kD
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

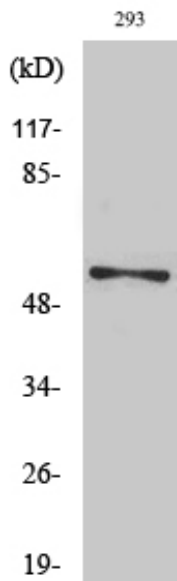
Avoid repeated freezing and thawing!

Usage suggestions

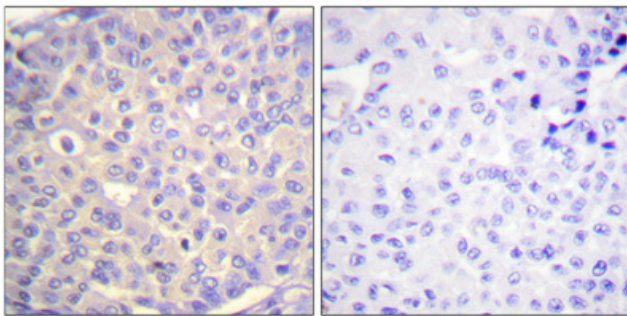
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



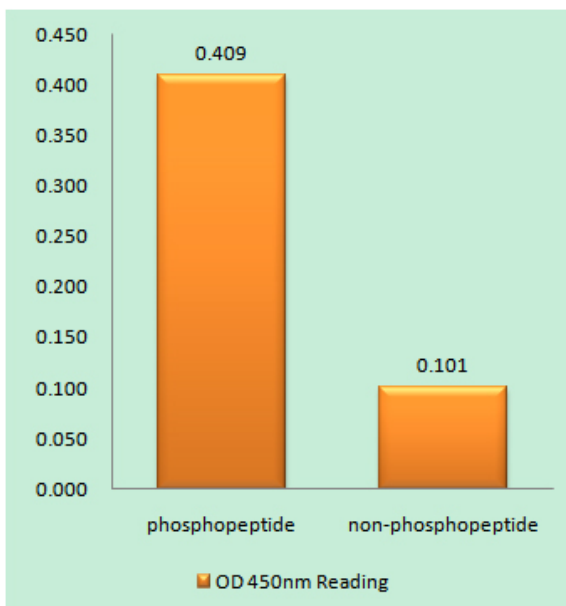
Products Images



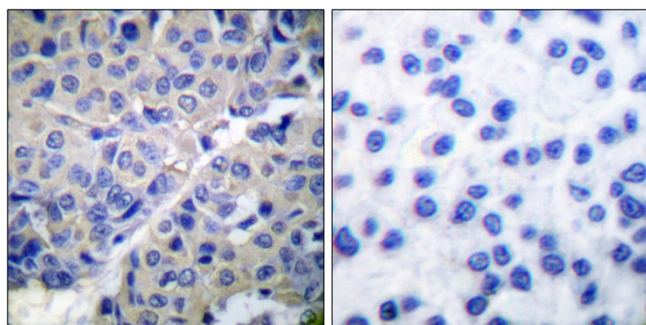
Western Blot analysis of various cells using Phospho-Synaptotagmin 1/2 (S309/306) Polyclonal Antibody



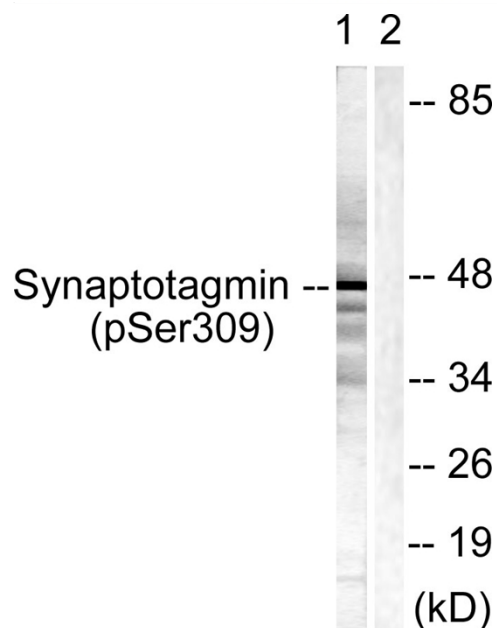
Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Synaptotagmin (Phospho-Ser309) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Synaptotagmin (Phospho-Ser309) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells treated with Sobital 0.4M 30', using Synaptotagmin (Phospho-Ser309) Antibody. The lane on the right is blocked with the phospho peptide.