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**Product Name:** Synaptotagmin 1/2 (phospho Ser309/306) Rabbit Polyclonal Antibody  
**Catalog #:** APRab05505

For research use only.

## Summary

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phosphorylated
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Application

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
<b>Molecular Weight</b>	47kDa

## Antigen Information

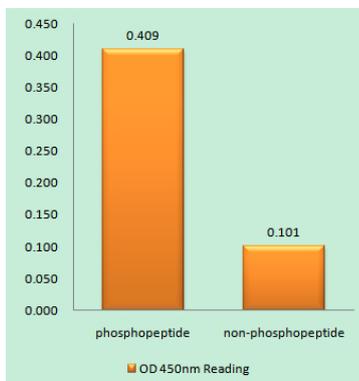
<b>Gene Name</b>	SYT1/SYT2
<b>Alternative Names</b>	SYT1; SVP65; SYT; Synaptotagmin-1; Synaptotagmin I; SytI; p65; SYT2; Synaptotagmin-2; Synaptotagmin II; SytII
<b>Gene ID</b>	6857/127833
<b>SwissProt ID</b>	P21579/Q8N9I0
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Synaptotagmin around the phosphorylation site of Ser309. AA range:276-325

## Background

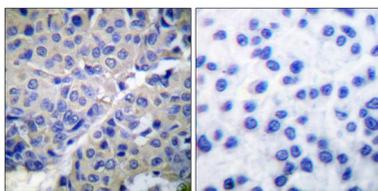
The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as  $\text{Ca}^{2+}$  sensors in the process of vesicular trafficking and exocytosis. Calcium binding to synaptotagmin-1 participates in triggering neurotransmitter release at the synapse (Fernandez-Chacon et al., 2001 [PubMed 11242035]).[supplied by OMIM, Jul 2010],cofactor: Binds 3 calcium ions per subunit. The ions are bound to the C2 domains.,domain: The first C2 domain mediates  $\text{Ca}^{2+}$ -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  $\text{Ca}^{2+}$ -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  $\text{Ca}^{2+}$ -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: Homotetramer (Probable). Interacts with SCAMP5, STN2, SV2A, SV2B, SV2C and RIMS1. Forms a complex with SV2B, syntaxin 1 and SNAP25.,

## Research Area

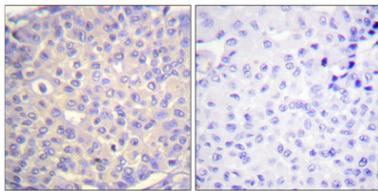
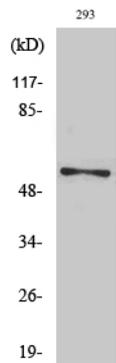
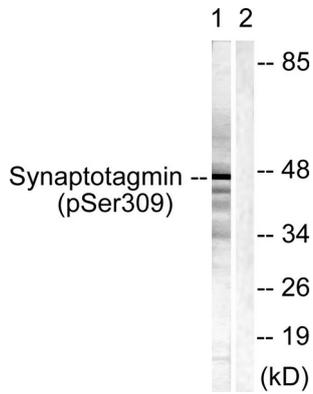
### Image Data



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.

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.