

# Synaptotagmin 1/2 (Phospho Ser309/306) Rabbit pAb

CatalogNo: YP0586 **Orthogonal Validated** 

## Key Features

### Host Species

- Rabbit

### Reactivity

- Human, Mouse, Rat

### Applications

- WB, IHC, IF, ELISA

### MW

- 47kD (Observed)

### Isotype

- IgG

## Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

## Recommended Dilution Ratios

**WB 1:500-1:2000**

**IHC 1:100-1:300**

**ELISA 1:10000**

**IF 1:50-200**

## Basic Information

**Clonality** Polyclonal

## Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human Synaptotagmin around the phosphorylation site of Ser309. AA range: 276-325

## Specificity

This antibody detects endogenous levels of Synaptotagmin 1/2 only when phosphorylated at Human:S309/306, Mouse:S308/309, Rat:S308/309..The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):GLSDP

## Target Information

**Gene name** SYT1/SYT2

**Protein Name** Synaptotagmin-1/2

Organism	Gene ID	UniProt ID
Human	<a href="#">6857</a> ; <a href="#">127833</a> ;	<a href="#">P21579</a> ; <a href="#">Q8N9I0</a> ;
Mouse	<a href="#">20979</a> ; <a href="#">20980</a> ;	
Rat	<a href="#">25716</a> ; <a href="#">24805</a> ;	<a href="#">P21707</a> ; <a href="#">P29101</a> ;

### Cellular Localization

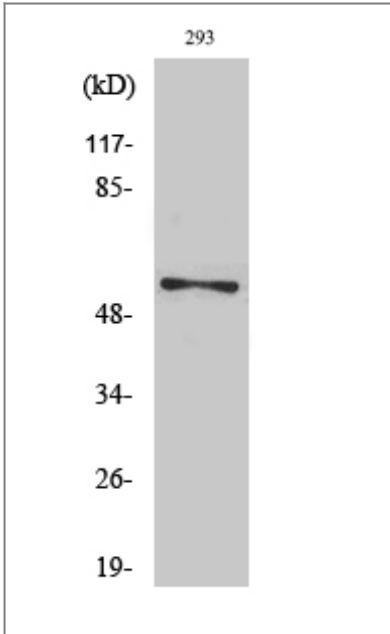
Cytoplasmic vesicle, secretory vesicle membrane ; Single-pass membrane protein .  
Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane ; Single-pass membrane protein .  
Cytoplasmic vesicle, secretory vesicle, chromaffin granule membrane ; Single-pass membrane protein .  
Cytoplasm .

**Tissue specificity** Expressed in melanocytes (PubMed:23999003).

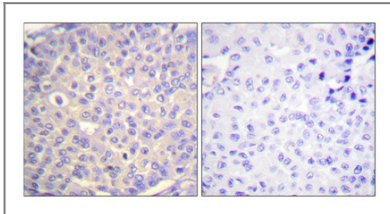
### Function

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: Homotetramer (Probable). Interacts with SCAMP5, STN2, SV2A, SV2B, SV2C and RIMS1. Forms a complex with SV2B, syntaxin 1 and SNAP25.,

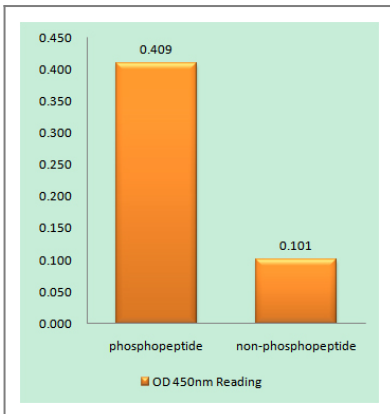
## Validation Data



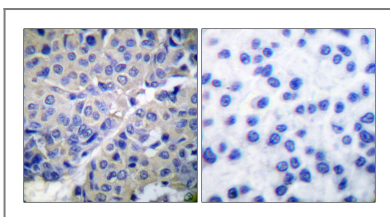
Western Blot analysis of various cells using Phospho-Synaptotagmin 1/2 (S309/306) Polyclonal Antibody



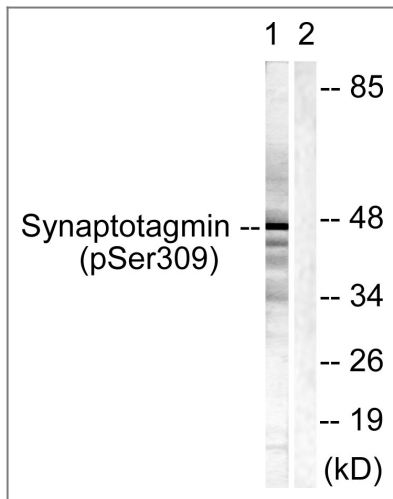
Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4°C overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



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.

## Contact information

Orders: [order@immunoway.com](mailto:order@immunoway.com)  
Support: [tech@immunoway.com](mailto:tech@immunoway.com)  
Telephone: 877-594-3616 (Toll Free), 408-747-0185  
Website: <http://www.immunoway.com>  
Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information:  
**Synaptotagmin 1/2 (Phospho Ser309/306) Rabbit pAb**

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[Antibody](#) | [ELISA Kits](#) | [Protein](#) | [Reagents](#)