

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

<b>Catalog No :</b>	YP0586
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Synaptotagmin 1/2
<b>Fields :</b>	>>Synaptic vesicle cycle
<b>Gene Name :</b>	SYT1/SYT2
<b>Protein Name :</b>	Synaptotagmin-1/2
<b>Human Gene Id :</b>	6857/127833
<b>Human Swiss Prot No :</b>	P21579/Q8N9I0
<b>Mouse Gene Id :</b>	20979/20980
<b>Rat Gene Id :</b>	25716/24805
<b>Rat Swiss Prot No :</b>	P21707/P29101
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Synaptotagmin around the phosphorylation site of Ser309. AA range:276-325
<b>Specificity :</b>	Phospho-Synaptotagmin 1/2 (S309/306) Polyclonal Antibody detects endogenous levels of Synaptotagmin 1/2 protein only when phosphorylated at S309/306.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Concentration :** 1 mg/ml

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

**Observed Band :** 47kD

**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],

**Function :** 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: H

**Subcellular Location :** 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 .

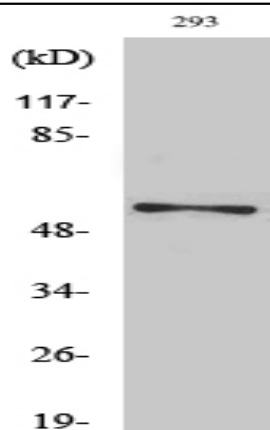
**Expression :** Expressed in melanocytes (PubMed:23999003).

**Tag :** orthogonal

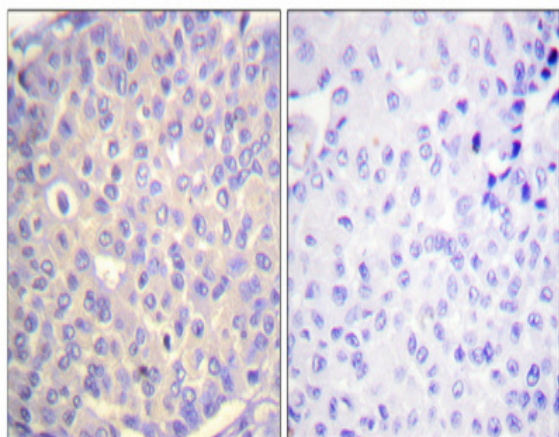
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**No4 :** 1

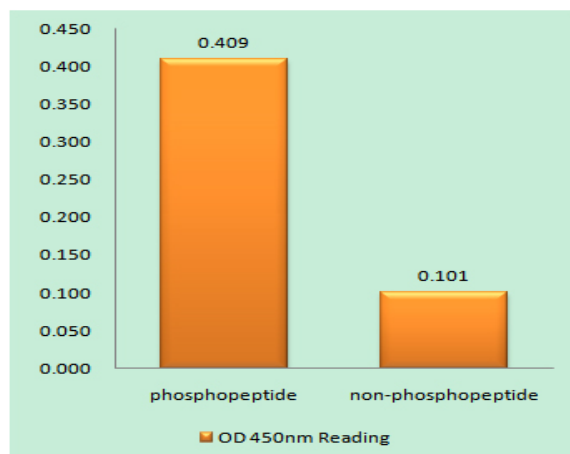
**Products Images**



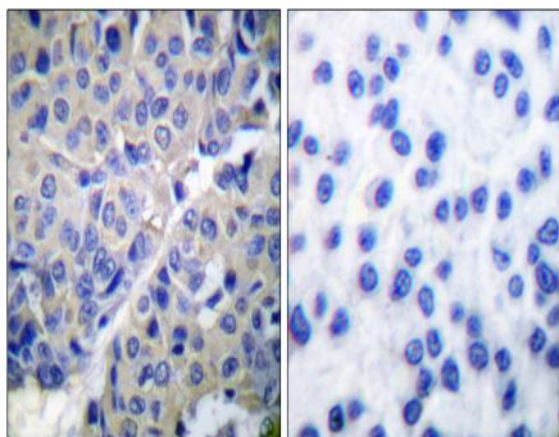
Western Blot analysis of various cells using Phospho-Synaptotagmin 1/2 (S309/306) Polyclonal Antibody



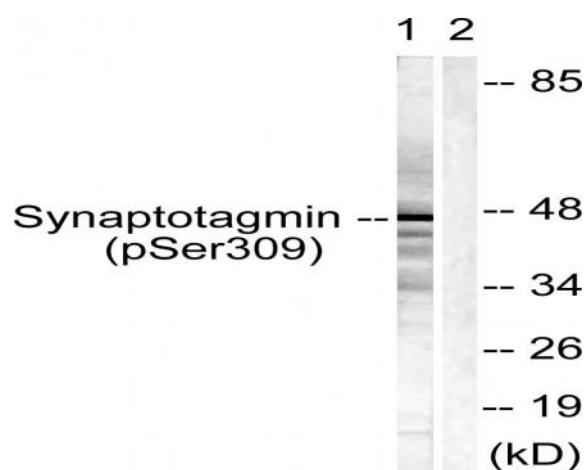
Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.



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 phosphopeptide.



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 phosphopeptide.