

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

Catalog No :	YP0586
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Synaptotagmin 1/2
Fields :	>>Synaptic vesicle cycle
Gene Name :	SYT1/SYT2
Protein Name :	Synaptotagmin-1/2
Human Gene Id :	6857/127833
Human Swiss Prot No :	P21579/Q8N9I0
Mouse Gene Id :	20979/20980
Rat Gene Id :	25716/24805
Rat Swiss Prot No :	P21707/P29101
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
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200
Purification :	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

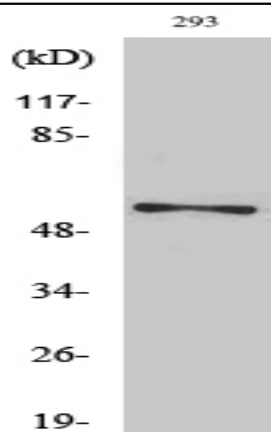
Background : The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as Ca(2+) sensors in the process of vesicular trafficking and exocytosis. Calcium binding to synaptotagmin-1 participates in triggering neurotransmitter release at the synapse (Fernandez-Chacon et al., 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 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

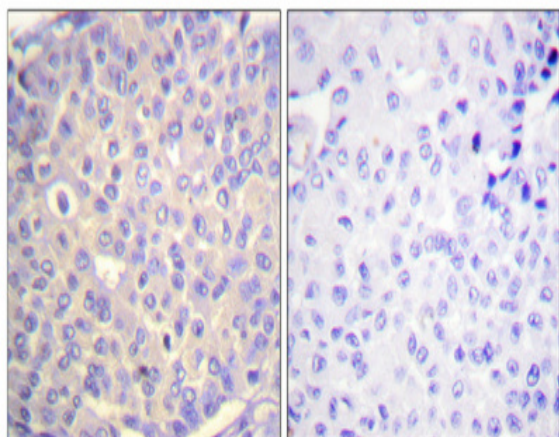
Subcellular Location : Cytoplasmic vesicle, secretory vesicle membrane ; Single-pass membrane protein . Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane ; Single-pass membrane protein . Cytoplasmic vesicle, secretory vesicle, chromaffin granule membrane ; Single-pass membrane protein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

Expression : Expressed in melanocytes (PubMed:23999003).

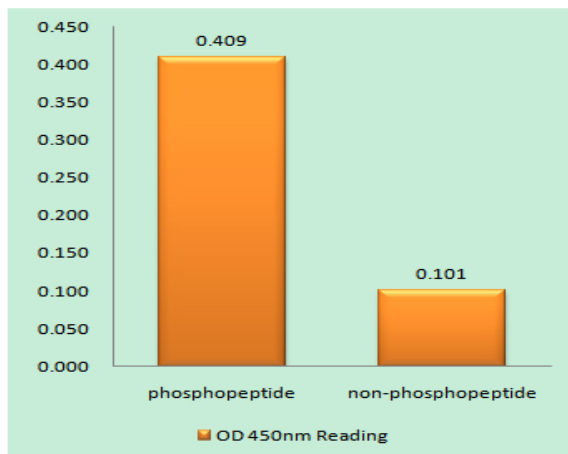
Products Images



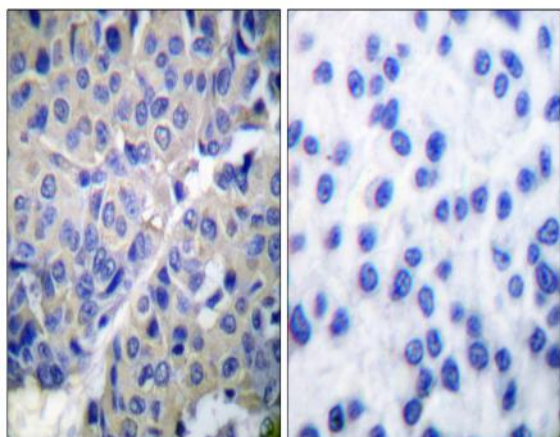
Western Blot analysis of various cells using Phospho-Synaptotagmin 1/2 (S309/306) Polyclonal Antibody



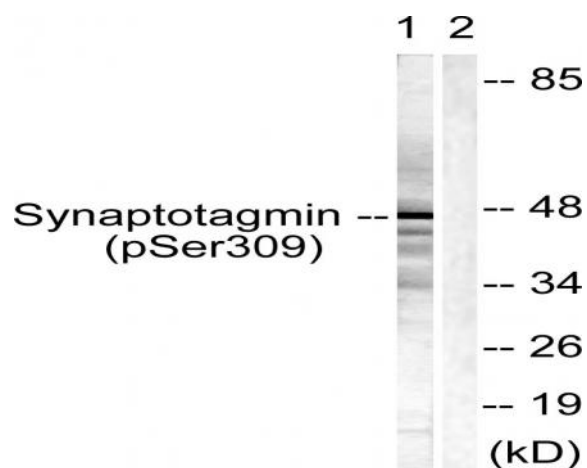
Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



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.