

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

P21579/Q8N9I0

No:

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, lgG

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-

1/4



chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 47kD

The synaptotagmins are integral membrane proteins of synaptic vesicles thought **Background:**

> 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

Cytoplasmic vesicle, secretory vesicle membrane; Single-pass membrane Subcellular Location:

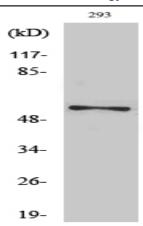
protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Single-pass membrane protein. Cytoplasmic vesicle, secretory vesicle.

chromaffin granule membrane; Single-pass membrane protein. Cytoplasm.

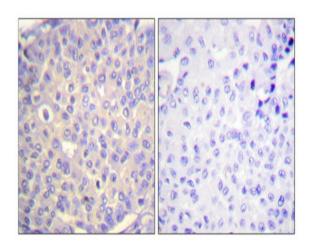
Expressed in melanocytes (PubMed:23999003). **Expression:**

Products Images

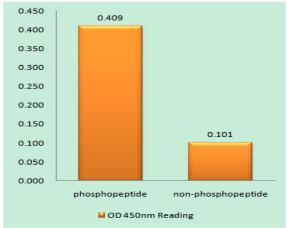
2/4



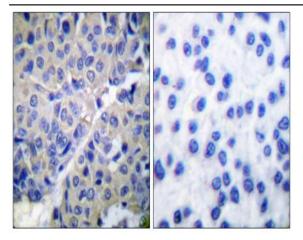
Western Blot analysis of various cells using Phospho-Synaptotagmin 1/2 (S309/306) Polyclonal Antibody



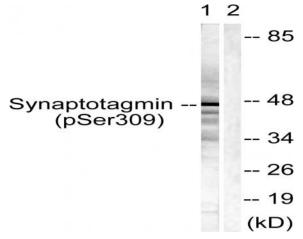
Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4° overnight). Highpressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was preabsorbed by immunogen peptide.



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.