



# Synaptotagmin Polyclonal Antibody

<b>Catalog No</b>	BYab-00742
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	SYT1/SYT2
<b>Protein Name</b>	Synaptotagmin-1/2
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Synaptotagmin. AA range:176-225
<b>Specificity</b>	Synaptotagmin Polyclonal Antibody detects endogenous levels of Synaptotagmin protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	SYT1; SVP65; SYT; Synaptotagmin-1; Synaptotagmin I; SytI; p65; SYT2; Synaptotagmin-2; Synaptotagmin II; SytII
<b>Observed Band</b>	60kD
<b>Cell Pathway</b>	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 .
<b>Tissue Specificity</b>	Expressed in melanocytes (PubMed:23999003).
<b>Function</b>	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

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been reported. It can bind to at least three additional proteins in a  $\text{Ca}^{2+}$ -independent manner; these are neuroligins, syntaxin and AP2. similarity: Belongs to the synaptotagmin family. similarity: Contains 2 C2 domains. subcellular location: Synaptic vesicles and chromaffin granules. subunit: H

### 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],

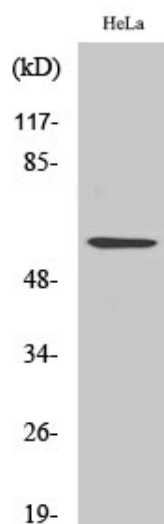
### matters needing attention

Avoid repeated freezing and thawing!

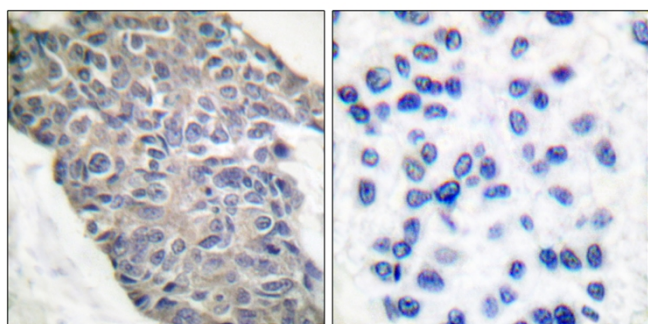
### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

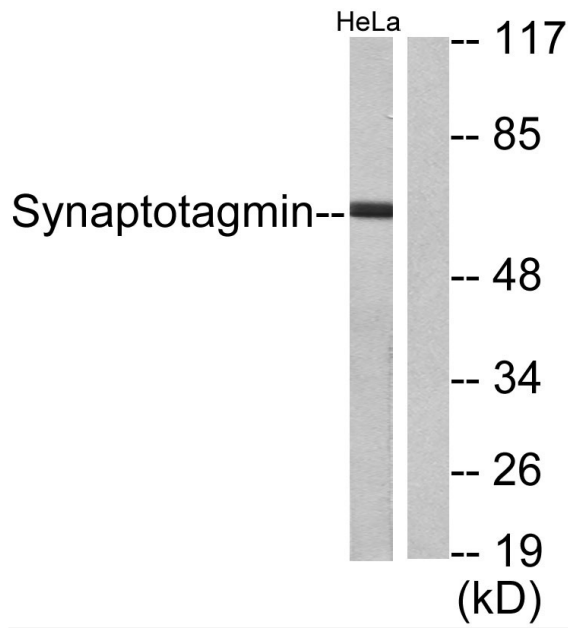
## Products Images



Western Blot analysis of various cells using Synaptotagmin Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Synaptotagmin Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa cells, using Synaptotagmin Antibody. The lane on the right is blocked with the synthesized peptide.