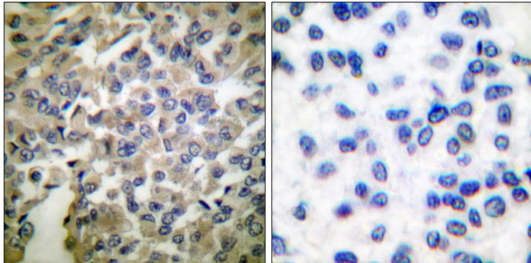


Product name:	Synaptotagmin Rabbit Polyclonal Antibody
Cat number:	ABN18495
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Synaptotagmin. AA range:276-325
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	50kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.



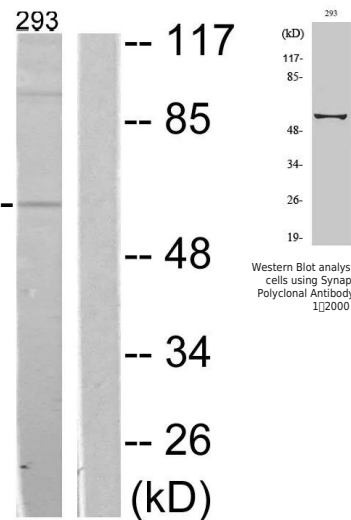
Background:

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],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 neuexins, 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.,



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

Synaptotagmin--



Western blot analysis of lysates from 293 cells, treated with Forskolin 40nM 30', using Synaptotagmin Antibody. The lane on the right is blocked with the synthesized peptide.