

Synaptotagmin Polyclonal Antibody

YT4485 Catalog No:

Human; Mouse; Rat Reactivity:

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:

Mouse Gene Id: 20979/20980

Rat Gene Id: 25716/24805

Rat Swiss Prot No: P21707/P29101

The antiserum was produced against synthesized peptide derived from human Immunogen:

Synaptotagmin. AA range:176-225

Synaptotagmin Polyclonal Antibody detects endogenous levels of **Specificity:**

Synaptotagmin protein.

P21579/Q8N9I0

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200 **Dilution:**

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: 60kD

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 $\ensuremath{\mathsf{C}}$ 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:

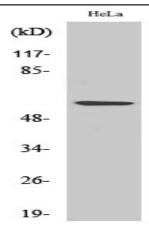
Cytoplasmic vesicle, secretory vesicle membrane; Single-pass membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Single-pass membrane protein. Cytoplasmic vesicle, secretory vesicle,

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

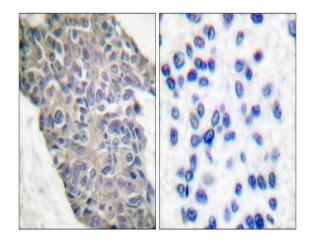
Expression:

Expressed in melanocytes (PubMed:23999003).

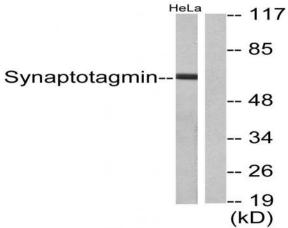
Products Images



Western Blot analysis of various cells using 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.