

## Product datasheet for **TA326884**

### Synaptotagmin 1 (SYT1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, WB
Recommended Dilution:	WB 1:500 - 1:2000;IF 1:50- 1:200
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human SYT1
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	synaptotagmin 1
Database Link:	<a href="#">NP_005630</a> <a href="#">Entrez Gene 20979 Mouse</a> <a href="#">Entrez Gene 25716 Rat</a> <a href="#">Entrez Gene 6857 Human</a> <a href="#">P21579</a>



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**Background:**

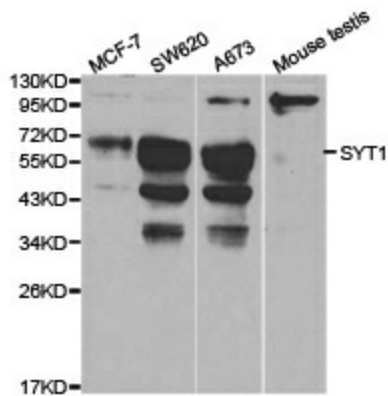
Synaptotagmin 1 (SYT1) is an integral membrane protein found in synaptic vesicles thought to play a role in vesicle trafficking and exocytosis. Individual SYT1 proteins are composed of an amino-terminal transmembrane region, a central linker region and a pair of carboxy-terminal C2 domains responsible for binding  $Ca^{2+}$ . The C2 domains appear to be functionally distinct, with the C2A domain responsible for regulating synaptic vesicle fusion in a calcium-dependent manner during exocytosis while the C2B domain allows for interaction between adjacent SYT1 proteins. Because synaptotagmin 1 binds calcium and is found in synaptic vesicles, this integral membrane protein is thought to act as a calcium sensor in fast synaptic vesicle exocytosis. Evidence suggests possible roles in vesicle-mediated endocytosis and glucose-induced insulin secretion as well. SYT1 binds several different SNARE proteins during calcium-mediated vesicle endocytosis and an association between SYT1 and the SNARE protein SNAP-25 is thought to be a key element in vesicle-mediated exocytosis.

**Synonyms:**

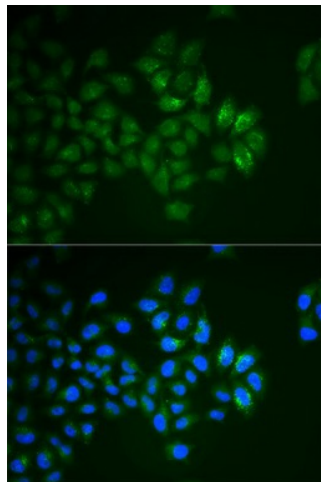
P65; SVP65; SYT

**Protein Families:**

Secreted Protein, Transmembrane

**Product images:**

Western blot analysis of various cell lines, using SYT1 antibody.



Immunofluorescence analysis of HeLa cell using SYT1 antibody. Blue: DAPI for nuclear staining.