

**Synaptotagmin-6 Antibody**  
**Synaptotagmin 6 Antibody, Clone S270-47**  
**Catalog # ASM10259**

## Specification

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### Synaptotagmin-6 Antibody - Product Information

Application	<b>WB</b>
Primary Accession	<a href="#">O9R0N8</a>
Other Accession	<a href="#">NP_061270.2</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Monoclonal</b>

#### Description

Mouse Anti-Mouse Synaptotagmin-6 Monoclonal IgG1

#### Target/Specificity

Detects ~55kDa. Does not cross-react with other synaptotagmins.

#### Other Names

SYT-6 Antibody, SYT6 Antibody, Synaptotagmin 6 Antibody, Synaptotagmin VI Antibody, SytVI Antibody, Syt VI Antibody, Synaptotagmin6 Antibody, SynaptotagminVI Antibody

#### Immunogen

Fusion protein amino acids 246-333 (Cytoplasmic C2A domain) of mouse Synaptotagmin-6

#### Purification

Protein G Purified

Storage **-20°C**

#### Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature **Blue Ice or 4°C**

#### Certificate of Analysis

1 µg/ml of SMC-425 was sufficient for detection of Synaptotagmin-6 in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

#### Cellular Localization

Cytoplasmic Vesicle

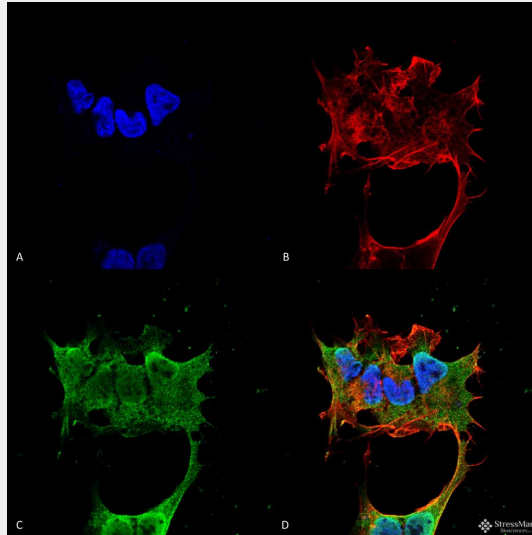
### Synaptotagmin-6 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

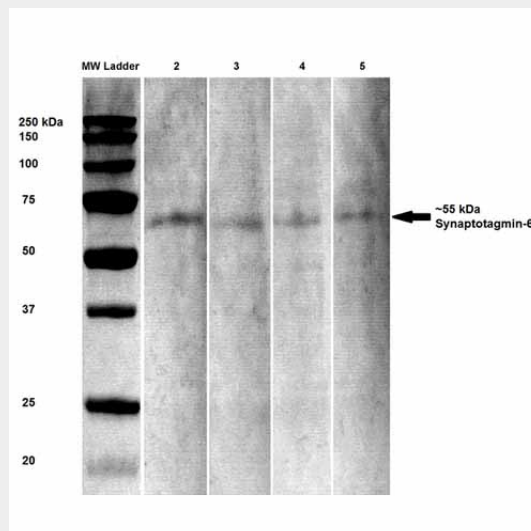
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Synaptotagmin-6 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Synaptotagmin-6 Monoclonal Antibody, Clone S270-47 (ASM10259). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Synaptotagmin-6 Monoclonal Antibody (ASM10259) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000; 1:5000 for 60 min RT, 5 min RT. Localization: Cytoplasmic Vesicle, Nucleus. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Synaptotagmin-6 Antibody (D) Composite.



Western Blot analysis of Rat brain lysates showing detection of Synaptotagmin 6 protein using Mouse Anti-Synaptotagmin 6 Monoclonal Antibody, Clone S270-47 (ASM10259). Primary Antibody: Mouse Anti-Synaptotagmin 6 Monoclonal Antibody (ASM10259) at 1:100, 1:250, 1:500, and 1:1000.

### Synaptotagmin-6 Antibody - Background

Synaptotagmins constitute a family of membrane-trafficking proteins that are characterized by an N-terminal transmembrane region (TMR), a variable linker, and two C-terminal C2 domains - C2A and C2B. There are 15 members in the mammalian synaptotagmin family. There are several C2-domain containing protein families that are related to synaptotagmins, including transmembrane (Ferlins, E-Syts, and MCTPs) and soluble (RIMs, Munc13s, synaptotagmin-related proteins and B/K) proteins. 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 participates in triggering neurotransmitter release at the synapse. The first domain mediates Ca(2+)-dependent phospholipid binding. The second C2 domain mediates interaction with Stonin 2. Synaptotagmin 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 diacylbackbone. 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.

### **Synaptotagmin-6 Antibody - References**

1. Schengrund C.L., et al. (2002) J Biol Chem. 277: 32815.
2. Reichardt L.F., et al. (1981) J Cell Biol. 91:257.