

**Synaptotagmin-10 Antibody**  
**Synaptotagmin 10 Antibody, Clone S269-73**  
**Catalog # ASM10257**

**Specification**

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**Synaptotagmin-10 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">O9R0N4</a>
Other Accession	<a href="#">NP_061273.1</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Monoclonal</b>

**Description**

Mouse Anti-Mouse Synaptotagmin-10 Monoclonal IgG1

**Target/Specificity**

Detects ~60kDa. Does not cross-react with Synaptotagmin-6 or Synaptotagmin-3 (or others).

**Other Names**

SYT10 Antibody, SYT-10 Antibody, Synaptotagmin 10 Antibody, Synaptotagmin X Antibody, SytX Antibody, P65 Antibody, SVP65 Antibody, DKFZp781D2042 Antibody, SYT Antibody

**Immunogen**

Fusion protein amino acids 248-335 (Cytoplasmic C2A domain) of mouse Synaptotagmin-10

**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-423 was sufficient for detection of Synaptotagmin-10 in 20 µg of Synaptotagmin10 transiently-transfected COS cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

Cytoplasmic Vesicle

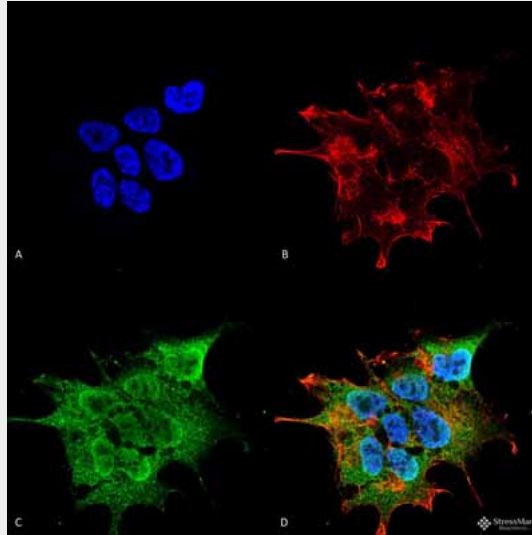
**Synaptotagmin-10 Antibody - Protocols**

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

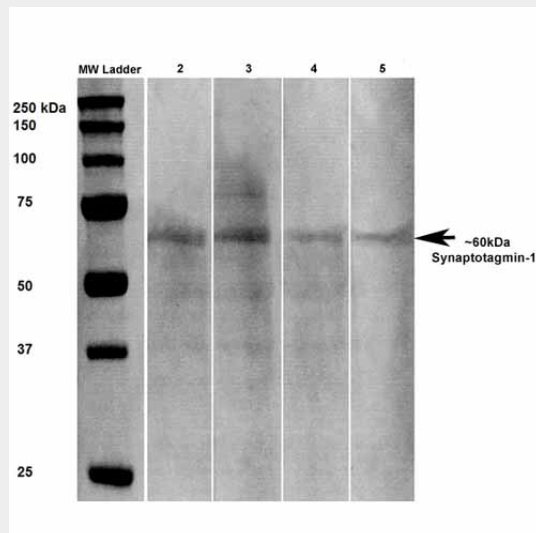
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

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

### Synaptotagmin-10 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Synaptotagmin-10 Monoclonal Antibody, Clone S269-73 (ASM10257). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Synaptotagmin-10 Monoclonal Antibody (ASM10257) 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-10 Antibody (D) Composite.



Western Blot analysis of Rat brain lysates showing detection of Synaptotagmin 10 protein using Mouse Anti-Synaptotagmin 10 Monoclonal Antibody, Clone S269-73 (ASM10257). Primary Antibody: Mouse Anti-Synaptotagmin 10 Monoclonal Antibody (ASM10257) at 1:100, 1:250, 1:500, and 1:1000.

## Synaptotagmin-10 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-10 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.